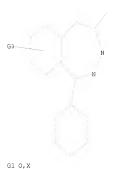
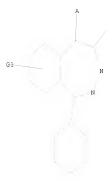
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L1
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L2
             13 S L1
L3
            828 S L1 SSS FUL
L4
           817 S L3 AND CAPLUS/LC
L5
            11 S L3 NOT L4
    FILE 'CAPLUS' ENTERED AT 14:48:04 ON 24 AUG 2010
L6
           315 S L3
           ANALYZE L6 1- RN HIT :
                                    817 TERMS
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L8
             1 S 22345-47-7/RN
    FILE 'CAPLUS' ENTERED AT 14:49:11 ON 24 AUG 2010
    FILE 'REGISTRY' ENTERED AT 14:49:37 ON 24 AUG 2010
L9
          1100 S 82059?/RN
L10
             2 S L3 AND L9
L11
               STRUCTURE UPLOADED
           206 S L11 SUB=L3 FUL
L12
L13
           622 S L3 NOT L12
L14
           620 S L13 AND CAPLUS/LC
L15
             2 S L13 NOT L14
    FILE 'CAPLUS' ENTERED AT 14:56:16 ON 24 AUG 2010
L16
            74 S L13
L17
           ANALYZE L16 1- RN HIT : 620 TERMS
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L18
             1 S 82230-53-3/RN
L19
             1 S 102771-12-0/RN
L20
           620 S L13 NOT (L18 OR L19)
    FILE 'CAPLUS' ENTERED AT 14:57:56 ON 24 AUG 2010
L21
           42 S L20
L22
            40 S L21 NOT (2010/SO OR 2009/SO OR 2008/SO)
=> d 11
L1 HAS NO ANSWERS
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STR



Structure attributes must be viewed using STN Express query preparation.

=> d 111 L11 HAS NO ANSWERS L11 STR



G1 O, X

Structure attributes must be viewed using STN Express query preparation.

=> d ibib abs hitstr total

L22 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:1248902 CAPLUS

DOCUMENT NUMBER: 149:471513

TITLE: 2,3-Benzodiazepine derivatives as adenosine transporter inhibitors and their preparation,

pharmaceutical compositions and use in the treatment

of psychotic diseases

INVENTOR(S): Csuzdi, Emese; Solyom, Sandor; Berzsenyi, Pal;

Andrasi, Ferenc; Sziraki, Istvan; Horvath, Katalin;

Nagy, Zoltan

PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva

Pharmaceuticals USA, Inc. SOURCE: PCT Int. Appl., 119pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Facent

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.					KIND DATE				APPLICATION NO.						DATE			
WO 2008124075					A1 20081016			WO 2008-US4420					20080402					
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	ΒZ,	
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	
		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	
		PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,	
		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	
		AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM								
AR 65903					A1		2009	0708	AR 2008-101355						2	20080401		
US 20080269202					A1		2008	1030	US 2008-80418					20080402				
PRIORITY APPLN. INFO.:									1	US 2	007-	9215	32P	1	P 2	0070	102	
									1	US 2	007-	9366	31P	1	P 2	0070	520	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 149:471513 GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Disclosed are 2,3-benzodiazepines of formula I, which are useful in treating psychotic disorders. Compds. of formula I wherein R3 is (un)substituted 5- to 6-membered heterocyclic ring, aminocarbonyl and derivs., aminothiocarbonyl and derivs., c1-4 alkoxycarbonyl and phenoxycarbonyl; R4-R8 are independently H, Halo, C1-3 alkyl, NO2 NH2 and derivs.; R9 and R10 are independently C1-3 alkoxy; and their sterecisomers and pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by a general procedure (procedure given). All the invention compds. were evaluated for their adenosine transporter inhibitory activity. From the assay, it was determined that II exhibited the

10/567.598

inhibition of 96%.

IT 1071132-36-9P 1071132-40-5P 1071132-44-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate and intermediate; preparation of benzodiazepine derivs. as

adenosine transporter inhibitors useful in the treatment of psychotic diseases)

RN 1071132-36-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid,

4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, phenyl ester (CA INDEX NAME)

RN 1071132-40-5 CAPLUS

CN Methanone, [4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-1H-imidazol-1-yl- (CA INDEX NAME)

RN 1071132-44-9 CAPLUS

CN Methanone, [(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-1H-imidazol-1-yl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

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Me
                            OMe
             R
                            OMe
                              NO2
тт
     1071130-26-1P
                       1071130-29-4P
                                          1071130-33-0P
     1071130-37-4P
                       1071130-41-0P
                                          1071130-44-3P
                       1071130-52-3P
                                          1071130-55-6P
     1071130-48-7P
                                          1071130-79-4P
     1071130-68-1P
                       1071130-76-1P
     1071130-83-0P
                       1071130-87-4P
                                          1071130-90-9P
     1071130-93-2P
                       1071130-96-5P
                                          1071131-00-4P
     1071131-02-6P
                       1071131-13-9P
                                          1071131-18-4P
                       1071131-29-7P
     1071131-24-2P
                                          1071131-31-1P
     1071131-34-4P
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     1071131-62-8P
                       1071131-65-1P
                                          1071131-68-4P
     1071131-70-8P
                       1071131-72-0P
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                                          1071132-69-8P
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                       1071132-95-0P
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     1071133-05-5P
                       1071133-07-7P
                                          1071133-09-9P
     1071133-14-6P
                       1071133-32-8P
                                          1071133-45-3P
     1071133-49-7P
                       1071133-52-2P
                                          1071133-60-2P
     1071133-63-5P
                       1071133-66-8P
                                          1071133-69-1P
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (drug candidate; preparation of benzodiazepine derivs. as adenosine
        transporter inhibitors useful in the treatment of psychotic diseases)
RN
     1071130-26-1 CAPLUS
CN
     3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-
```

nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

Page 6

RN 1071130-29-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(2-thiazolyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071130-33-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

RN 1071130-37-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(2-thiazolyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071130-41-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071130-44-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(4-methyl-2-thiazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071130-48-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-2-thiazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071130-52-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 3-(4,5-dimethyl-2-thiazolyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071130-55-6 CAPLUS

CN 3H-2,3-Benzodiazepine, 3-(4,5-dimethyl-2-thiazolyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071130-68-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 3-(4,5-dihydro-2-thiazolyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071130-76-1 CAPLUS

CN 4(5H)-Thiazolone, 2-[4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 1071130-79-4 CAPLUS

CN 4(5H)-Thiazolone, 2-[4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-5-methyl- (CA INDEX NAME)

RN 1071130-83-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

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RN 1071130-87-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071130-90-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071130-93-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

RN 1071130-96-5 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071131-00-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

RN 1071131-02-6 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8dimethoxy-4-methyl-3-(1,3,4-thiadiazo1-2-yl)-, (4R)- (CA INDEX NAME) Absolute stereochemistry.

RN 1071131-13-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 7,8-diethoxy-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

RN 1071131-18-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071131-24-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-

nitrophenyl)-3-(1,3,4-oxadiazol-2-yl)- (CA INDEX NAME)

RN 1071131-29-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-1,3,4-oxadiazol-2-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071131-31-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, hydrazide (CA INDEX NAME)

RN 1071131-34-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(1,4,2-oxathiazol-3-yl)- (CA INDEX NAME)

- RN 1071131-39-9 CAPLUS
- CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(1,4,2-oxathiazol-3-yl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- RN 1071131-41-3 CAPLUS
- CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(1,4,2-oxathiazol-3-yl)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

- RN 1071131-45-7 CAPLUS
- CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(1,4,2-oxathiazol-3-yl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071131-55-9 CAPLUS

CN 1,2,4-Thiadiazol-3(2H)-one, 5-[4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-2-methyl- (CA INDEX NAME)

RN 1071131-59-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 3-(4,5-dihydro-2-oxazoly1)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071131-62-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-

nitrophenyl)-3-(1,2,4-oxadiazol-3-yl)- (CA INDEX NAME)

RN 1071131-65-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(1,2,4-oxadiazol-3-yl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071131-68-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(1,2,4-oxadiazol-3-yl)- (CA INDEX NAME)

RN 1071131-70-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(1,2,4-oxadiazol-3-yl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071131-72-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(1,2,4-oxadiazol-3-yl)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071131-74-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)- (CA INDEX NAME)

RN 1071131-76-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071131-80-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(5-methyl-1,2,4-oxadiazol-3-yl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071131-84-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-1,2,4-oxadiazol-3-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

- RN 1071132-06-3 CAPLUS
- CN 1,2,4-Oxadiazol-5(2H)-one, 3-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- RN 1071132-08-5 CAPLUS
- CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(1H-1,2,4-triazol-5-yl)- (CA INDEX NAME)

- RN 1071132-11-0 CAPLUS
- CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(3-methyl-1H-1,2,4-triazol-5-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-16-5 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1-methyl-1H-1,2,4-triazol-5-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-19-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1-methyl-1H-1,2,4-triazol-3-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-23-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 3-(1,3-dimethyl-1H-1,2,4-triazol-5-yl)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-26-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 3-(1,5-dimethyl-1H-1,2,4-triazol-3-yl)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-30-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-2-oxazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-48-3 CAPLUS

CN Methanone, [(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-1H-imidazol-1-yl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071132-51-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-55-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(2-nitrophenyl)- (CA INDEX NAME)

RN 1071132-60-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(3-nitrophenyl)- (CA INDEX NAME)

RN 1071132-63-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071132-65-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(4-nitrophenyl)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071132-69-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(3-methyl-4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-72-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(3-methyl-4-nitrophenyl)-, (4R)-(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071132-74-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(3-methyl-4-nitrophenyl)-, (4S)-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

- RN 1071132-78-9 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

- RN 1071132-81-4 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(3-chloro-4-nitropheny1)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-, (4R)-(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- RN 1071132-85-8 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(3,5-dimethyl-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071132-89-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, N-ethyl-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071132-91-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, N-ethyl-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071132-95-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, N-ethyl-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-,

(4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- RN 1071132-97-2 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-N-(1-methylethyl)-1-(4-nitrophenyl)-(CA INDEX NAME)

- RN 1071133-05-5 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-N-(1-methylethyl)-1-(3-methyl-4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071133-07-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-N-propyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071133-09-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-N-propyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071133-14-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

 $\label{eq:normalized} $$ N-buty1-4,5-dihydro-7,8-dimethoxy-4-methy1-1-(4-nitropheny1)- (CA INDEX NAME)$$

RN 1071133-32-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-N,N,4-trimethyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071133-45-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, N-cyclopropyl-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071133-49-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, N-cyclopropyl-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)-(CA INDEX NAB)

Absolute stereochemistry. Rotation (+).

RN 1071133-52-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, N-cyclopropyl-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071133-60-2 CAPLUS

CN Methanone, [4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-1-piperidinyl- (CA INDEX NAME)

RN 1071133-63-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-N,7,8-trimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071133-66-8 CAPLUS

CN 3H-2, 3-Benzodiazepine-3-carboxamide, 4,5-dihydro-N,7,8-trimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071133-69-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzodiazepine derivs. as adenosine

1071779-70-8P

transporter inhibitors useful in the treatment of psychotic diseases)

RN 1071130-60-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)- (CA INDEX NAME)

RN 1071130-63-6 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-3-(4,5-dimethyl-2-thiazolyl)-4,5dihydro-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

HC1

RN 1071130-73-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 3-(4,5-dihydro-2-thiazoly1)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1071131-07-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

RN 1071131-09-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(4-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methy1-3-(1,3,4-thiadiazo1-2-y1)- (CA INDEX NAME)

RN 1071131-11-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3,4-dimethoxyphenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

RN 1071131-21-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 3-(5-ethyl-1,3,4-thiadiazol-2-yl)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1071131-49-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(4-fluorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,4,2-oxathiazol-3-yl)- (CA INDEX NAME)

RN 1071131-51-5 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,4,2-oxathiazol-3-yl)-1-phenyl- (CA INDEX NAME)

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RN 1071131-87-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(4-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)- (CA INDEX NAME)

RN 1071131-90-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(4-fluorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)- (CA INDEX NAME)

RN 1071131-96-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-1-phenyl- (CA INDEX NAME)

RN 1071131-98-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 7,8-diethoxy-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3-(1,2,4-oxadiazol-3-yl)- (CA INDEX NAME)

RN 1071132-02-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3,4-dimethoxypheny1)-7,8-diethoxy-4,5-dihydro-4-methyl-3-(1,2,4-oxadiazol-3-vl)- (CA INDEX NAME)

RN 1071132-33-6 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3-(2-pyridinyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1071133-00-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-N-(1-methylethyl)-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071133-17-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-N-phenyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071133-22-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(3-chloropheny1)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071133-25-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071133-28-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-fluorophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071133-34-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-1-phenyl- (CA INDEX NAME)

RN 1071133-38-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 7,8-diethoxy-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071133-42-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(3,4-dimethoxypheny1)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071133-56-6 CAPLUS

CN Methanone, [4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-4-morpholinyl- (CA INDEX NAME)

RN 1071133-71-5 CAPLUS

CN Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071133-75-9 CAPLUS

CN Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]-2-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071133-79-3 CAPLUS

CN Benzenamine, 4-[(4S)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]-2-methyl- (CA INDEX NAME)

10/567,598

Absolute stereochemistry. Rotation (+).

RN 1071133-81-7 CAPLUS

CN Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]-2-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071133-83-9 CAPLUS

CN Benzenamine, 2-chloro-4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071133-85-1 CAPLUS

CN Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

- RN 1071133-87-3 CAPLUS
- CN Benzenamine, 4-[(4S)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- RN 1071133-90-8 CAPLUS
- CN Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-vl)-3H-2,3-benzodiazepin-1-vl]-2-methyl- (CA INDEX NAME)

- RN 1071133-95-3 CAPLUS
- CN Benzenamine, 2-chloro-4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-

thiadiazol-2-v1)-3H-2,3-benzodiazepin-1-v1]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071133-97-5 CAPLUS

N Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-00-3 CAPLUS

CN Benzenamine, 4-[(4R)-3-(4,5-dimethyl-2-thiazolyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-1-vl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-04-7 CAPLUS

CN Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]-2-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

- RN 1071134-06-9 CAPLUS
- CN Benzenamine, 2-chloro-4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

- RN 1071134-09-2 CAPLUS
- CN Benzenamine, 2-chloro-4-[(4R)-3-(4,5-dihydro-2-thiazolyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

10/567,598

RN 1071134-13-8 CAPLUS

CN Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,4,2-oxathiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-17-2 CAPLUS

CN Benzenamine, 4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,4,2-oxathiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]-2-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-22-9 CAPLUS

CN 1,2,4-Oxadiazol-5(2H)-one, 3-[(4R)-1-(4-amino-3-methylphenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 1071134-24-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-28-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071134-32-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-amino-3-methylphenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-, (4R)-(CA INDEX NAME)

RN 1071134-34-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3-methylphenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-, (4S)-(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071134-37-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-, (4R)-(CA INDEX NAME)

RN 1071134-41-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3,5-dimethylphenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-45-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-N-ethyl-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-49-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3-methylphenyl)-N-ethyl-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

RN 1071134-52-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-N-propyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-54-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,
1-(4-amino-3-methylphenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-N-propyl-,
(4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-56-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

 $1-(4-amino-3-methylphenyl)-4, 5-dihydro-7, 8-dimethoxy-4-methyl-N-(1-methylethyl)-, \ (4R)- \ (CA INDEX NAME)$

Absolute stereochemistry. Rotation (-).

RN 1071134-60-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-N-cyclopropyl-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)-(CA INDEX NABL)

Absolute stereochemistry. Rotation (-).

RN 1071134-62-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3-methylphenyl)-N-cyclopropyl-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

RN 1071134-64-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-N,N,4-trimethyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-68-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-N,7,8-trimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071134-70-7 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- RN 1071134-73-0 CAPLUS
- CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(4-methyl-2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- RN 1071134-76-3 CAPLUS
- CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- RN 1071134-79-6 CAPLUS
- CN Benzenamine, 4-[3-(4,5-dimethyl-2-thiazolyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071134-82-1 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]-2-methyl- (CA INDEX NAME)

RN 1071134-85-4 CAPLUS

CN Benzenamine, 4-[3-(4,5-dihydro-2-thiazoly1)-4,5-dihydro-7,8-dimethoxy-4-methy1-3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN 1071134-87-6 CAPLUS

CN 4(5H)-Thiazolone, 2-[1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 1071134-90-1 CAPLUS

CN 4(5H)-Thiazolone, 2-[1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]-5-methyl- (CA INDEX NAME)

RN 1071134-95-6 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071134-98-9 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-01-7 CAPLUS

CN Benzenamine, 4-[3-(5-ethyl-1,3,4-thiadiazol-2-yl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-05-1 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]-2-methyl- (CA INDEX NAME)

RN 1071135-07-3 CAPLUS

CN Benzenamine, 2-chloro-4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-11-9 CAPLUS

CN Benzenamine, 4-[7,8-diethoxy-4,5-dihydro-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-14-2 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-oxadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-18-6 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-1,3,4-oxadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-22-2 CAPLUS

CN 1,2,4-Thiadiazol-3(2H)-one, 5-[1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]-2-methyl- (CA INDEX NAME)

RN 1071135-26-6 CAPLUS

CN Benzenamine, 4-[3-(4,5-dihydro-2-oxazoly1)-4,5-dihydro-7,8-dimethoxy-4-methy1-3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN 1071135-28-8 CAPLUS

CN 4H-1,3,4-Thiadiazin-5(6H)-one, 2-[1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

- RN 1071135-31-3 CAPLUS
- CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- RN 1071135-35-7 CAPLUS
- CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-1,2,4-oxadiazol-3-v1)-3H-2,3-benzodiazepin-1-v1]- (CA INDEX NAME)

- RN 1071135-37-9 CAPLUS
- CN Benzenamine, 4=[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]-2-methyl- (CA INDEX NAME)

RN 1071135-41-5 CAPLUS

CN Benzenamine, 2-chloro-4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-46-0 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,4,2-oxathiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-49-3 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methy1-3-(5-methy1-2-oxazoly1)-3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN 1071135-54-0 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1H-1,2,4-triazol-5-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-56-2 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(3-methyl-1H-1,2,4-triazol-5-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-59-5 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1-methyl-1H-1,2,4-triazol-5-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-64-2 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1-methyl-1H-1,2,4-triazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-66-4 CAPLUS

CN Benzenamine, 4-[3-(1,5-dimethyl-1H-1,2,4-triazol-3-yl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 1071135-68-6 CAPLUS

CN Benzenamine, 4-[3-(1,3-dimethy1-1H-1,2,4-triazo1-5-y1)-4,5-dihydro-7,8-dimethoxy-4-methy1-3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN 1071135-73-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071135-76-6 CAPLUS

3H-2,3-Benzodiazepine-3-carboxamide, 1-(3-aminophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071135-79-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(2-aminopheny1)-4,5-dihydro-7,8-dimethoxy-N,4-dimethy1- (CA INDEX NAME)

CN

RN 1071135-81-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminopheny1)-N-ethyl-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071135-83-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-N-(1-methylethyl)-(CA INDEX NAME)

RN 1071135-85-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-N-cyclopropyl-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071135-87-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-N-butyl-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071135-91-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3-methylphenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071135-94-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071135-97-1 CAPLUS

CN Methanone, [1-(4-amino-3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]-4-morpholinyl- (CA INDEX NAME)

RN 1071135-99-3 CAPLUS

CN Methanone, [1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]-1-piperidinyl- (CA INDEX NAME)

RN 1071136-04-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminophenyl)-4,5-dihydro-N,7,8-trimethoxy-4-methyl- (CA INDEX NAME)

RN 1071136-07-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide,

1-(4-aminophenyl)-4,5-dihydro-7,8-dimethoxy-N,4-dimethyl- (CA INDEX NAME)

RN 1071136-11-2 CAPLUS

CN Acetamide, N-[4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]phenyl]- (CA INDEX NAME)

- RN 1071136-14-5 CAPLUS
- CN Acetamide, N-[4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazoly1)-3H-2,3-benzodiazepin-1-yl]-2-methylphenyl]- (CA INDEX NAME)

- RN 1071136-16-7 CAPLUS
- CN Acetamide, N-[4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

- RN 1071136-18-9 CAPLUS
- CN Acetamide, N-[4-[(4R)-3-(4,5-dimethyl-2-thiazolyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-1-yl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071136-23-6 CAPLUS

CN Acetamide, N-[4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]-2-methylphenyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071136-25-8 CAPLUS

CN Acetamide, N-[2-chloro-4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071136-30-5 CAPLUS

CN Acetamide, N-[4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]phenyl]- (CA INDEX NAME)

- RN 1071136-34-9 CAPLUS
- CN Acetamide, N-[4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(5-methyl-1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]phenyl]- (CA INDEX NAME)

- RN 1071136-36-1 CAPLUS
- CN Acetamide, N-[4-[(4R)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]-2-methylphenyl]- (CA INDEX NAME)

- RN 1071136-41-8 CAPLUS
- CN Urea, N-[4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]phenyl]-N'-methyl- (CA INDEX NAME)

- RN 1071210-68-8 CAPLUS
- CN Benzenamine, 4-[7,8-diethoxy-4,5-dihydro-4-methyl-3-(1,2,4-oxadiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- RN 1071779-70-8 CAPLUS
- CN Benzenamine, 4-[(4S)-4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,4,2-oxathiazol-3-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 84351-14-4P 102719-54-0P 102727-89-9P 102727-90-2P 102727-91-3P 1071136-72-5P 1071136-76-9P 1071136-77-0P 1071136-79-2P

RN

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1071136-83-8P
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                                     1071136-92-9P
1071136-95-2P
                  1071136-97-4P
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                  1071137-20-6P
1071137-05-7P
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1071137-33-1P
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1071137-63-7P
                  1071137-65-9P
                                     1071137-67-1P
1071137-69-3P
                  1071137-71-7P
                                     1071137-74-0P
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                  1071137-80-8P
                                     1071137-83-1P
1071137-86-4P
                  1071137-89-7P
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1071137-94-4P
                  1071137-95-5P
                                     1071137-96-6P
1071139-99-5P
                  1071140-03-8P
                                     1071140-52-7P
1071140-58-3P
                  1071210-73-5P
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate, preparation of benzodiazepine derivs. as adenosine transporter inhibitors useful in the treatment of psychotic diseases) 84351-14-4 CAPLUS

N 3H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 102719-54-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(4-fluorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 102727-89-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-phenyl- (CA

INDEX NAME)

RN 102727-90-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(4-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 102727-91-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3,4-dimethoxyphenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071136-72-5 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071136-76-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071136-77-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071136-79-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(2-nitrophenyl)- (CA INDEX NAME)

RN 1071136-83-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-nitrophenyl)- (CA INDEX NAME)

RN 1071136-88-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)- (CA INDEX NAME)

RN 1071136-92-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071136-95-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071136-97-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071137-01-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071137-05-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3,5-dimethyl-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071137-20-6 CAPLUS

CN 3H-2,3-Benzodiazepine, 7,8-diethoxy-4,5-dihydro-4-methyl-1-(4-nitrophenyl)(CA INDEX NAME)

RN 1071137-23-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} & \text{OMe} \\ \text{H}_2\text{N}-\text{C} & \text{N} \\ \text{S} & \text{N} \end{array}$$

RN 1071137-26-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071137-28-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)- (CA INDEX NAME)

RN 1071137-30-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide,

 $4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, \ (4R)- \ (CAINDEX NAME)$

Absolute stereochemistry. Rotation (-).

RN 1071137-33-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

$$\begin{array}{c|c} \text{Me} & \text{R} & \text{OMe} \\ \text{H}_2 \text{N} & \text{N} & \text{OMe} \\ \text{S} & \text{N} & \text{OMe} \\ \end{array}$$

RN 1071137-37-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 1-(3-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071137-41-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071137-45-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071137-48-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4S)- (CA INDEX NAME) Absolute stereochemistry. Rotation (+).

RN 1071137-52-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)- (CA INDEX NAME)

RN 1071137-54-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071137-57-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioy1 chloride,

CN

1-(3-chloro-4-nitropheny1)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071137-61-5 CAPLUS

3H-2,3-Benzodiazepine-3-carbothioyl chloride, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071137-63-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 1-(3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071137-65-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioy1 chloride, 1-(4-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methy1- (CA INDEX NAME)

RN 1071137-67-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioy1 chloride, 1-(3,4-dimethoxypheny1)-4,5-dihydro-7,8-dimethoxy-4-methy1- (CA INDEX NAME)

RN 1071137-69-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 7,8-diethoxy-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071137-71-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071137-74-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071137-78-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)- (CA INDEX NAME)

RN 1071137-80-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071137-83-1 CAPLUS CN 3H-2,3-Benzodiazepin

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 1071137-86-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 1-(3-chloro-4-nitropheny1)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071137-89-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1071137-90-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 1-(4-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071137-94-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 1-(4-fluorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071137-95-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 1-(3,4-dimethoxyphenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071137-96-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbonitrile, 7,8-diethoxy-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071139-99-5 CAPLUS

CN Carbamic acid, N-[[4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]thioxomethyl]-, phenyl ester (CA INDEX NAME)

RN 1071140-03-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-N-[(methylamino)carbonyl]-1-(4nitrophenyl)- (CA INDEX NAME)

RN 1071140-52-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboximidothioic acid,

4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, methyl ester (CA INDEX NAME)

RN 1071140-58-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-7,8-dimethoxy-4-methyl-N-[(2-methyl-1,3-dioxolan-2-yl)methyl]-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 1071210-73-5 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-nitrophenyl)-, (4R)- (CA INDEX NAME)

1071210-71-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzodiazepine derivs. as adenosine transporter inhibitors useful in the treatment of psychotic diseases)

RN 1071210-71-3 CAPLUS

Acetamide, N-[4-[4,5-dihydro-7,8-dimethoxy-4-methyl-3-(1,3,4-thiadiazol-2-CN y1)-3H-2,3-benzodiazepin-1-y1]pheny1]- (CA INDEX NAME)

ΙT 1234381-05-5 1234381-06-6

> RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of benzodiazepine derivs. as adenosine transporter inhibitors useful in the treatment of psychotic diseases)

RN 1234381-05-5 CAPLUS

3H-2,3-Benzodiazepine-3-carbothioyl chloride, CN

4,5-dihydro-7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{OMe} \\ \text{C1-} & \text{OMe} \\ \\ \text{S} & \text{N} \end{array}$$

1234381-06-6 CAPLUS RN

CN 3H-2,3-Benzodiazepine-3-carbothiov1 chloride, 1-(4-fluorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME) ΙT

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1071138-08-3P
                  1071138-18-5P
                                     1071138-27-6P
1071138-36-7P
                  1071138-44-7P
                                     1071138-60-7P
1071138-68-5P
                  1071138-79-8P
                                     1071138-88-9P
1071138-95-8P
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                                     1071139-16-6P
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1071139-46-2P
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1071139-72-4P
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1071140-40-3P
                  1071140-43-6P
                                     1071140-46-9P
1071140-47-0P
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RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prophetic intermediate; preparation of benzodiazepine derivs. as adenosine transporter inhibitors useful in the treatment of psychotic diseases) RN 1071138-08-3 CAPUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid,

4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1071138-18-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, 1,1-dimethylethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 1071138-27-6 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, 1,1-dimethylethyl ester, (4S)- (CA INDEX NAME)

- RN 1071138-36-7 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(2-nitrophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 1071138-44-7 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxylic acid,

4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-nitrophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 1071138-60-7 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxylic acid,
 - 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-,
 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 1071138-68-5 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxvlic acid,

4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-,
1,1-dimethylethyl ester, (4R)- (CA INDEX NAME)

- RN 1071138-79-8 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl1-1(3-methyl1-4-nitrophenyl)-, 1,1-dimethylethyl ester, (45)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 1071138-88-9 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 1071138-95-8 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, 1,1-dimethylethyl ester, (4R)- (CA INDEX NAME)

RN 1071139-05-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(3,5-dimethyl-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, 1,1-dimethylethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1071139-16-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1071139-21-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid,

1-(4-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, 1,1-dimethylethyl
ester (CA INDEX NAME)

RN 1071139-29-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(4-fluorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1071139-36-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(3,4-dimethoxyphenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1071139-46-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{OMe} \\ \text{t-BuO-C-N} & \text{OMe} \\ \text{O} & \text{N-Ph} \end{array}$$

RN 1071139-52-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 7,8-diethoxy-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1071139-56-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, hydrazide, (4R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 1071139-58-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid,

4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, hydrazide, (4S)-(CA INDEX NAME)

Absolute stereochemistry.

- RN 1071139-61-1 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, hydrazide (CA INDEX NAME)

- RN 1071139-64-4 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, hydrazide, 4(R)- (CA INDEX NAME)

RN 1071139-65-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, hydrazide (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{OMe} \\ & \text{H}_2\text{N}-\text{NH}-\text{C}-\text{N} \\ & \text{S} & \text{N} \\ & \text{C}_1 & \text{NO}_2 \\ \end{array}$$

RN 1071139-68-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 1-(3-chloro-4-nitrophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, hydrazide, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1071139-70-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 1-(3-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, hydrazide (CA INDEX NAME)

$$\begin{array}{c} \text{Me} & \text{OMe} \\ \text{H}_2\text{N}-\text{NH}-\text{C} & \text{N} \\ \text{S} & \text{N} \end{array}$$

RN 1071139-72-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 1-(4-chlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, hydrazide (CA INDEX NAME)

RN 1071139-74-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 1-(2,4-dimethoxyphenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, hydrazide (CA INDEX NAME)

RN 1071139-77-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 7,8-diethoxy-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, hydrazide (CA INDEX

NAME)

RN 1071139-81-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, 2-formylhydrazide (CA INDEX NAME)

RN 1071139-84-8 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 1071139-87-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide,

- RN 1071139-89-3 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-N-hydroxy-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4R)-(CA INDEX NAME)

Absolute stereochemistry.

- RN 1071139-92-8 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-N-hydroxy-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-, (4S)-(CA INDEX NAME)

Absolute stereochemistry.

RN 1071139-93-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-N-hydroxy-7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1071139-96-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 1-(4-fluorophenyl)-4,5-dihydro-N-hydroxy-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 1071139-98-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 4,5-dihydro-N-hydroxy-7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 1071140-05-0 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 1071140-11-8 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1071140-13-0 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1071140-16-3 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1071140-20-9 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1071140-25-4 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1071140-27-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1071140-33-4 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1071140-35-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1071140-38-9 CAPLUS CN 3H-2,3-Benzodiazepin

N 3H-2,3-Benzodiazepine-3-carbonitrile, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

- RN 1071140-40-3 CAPLUS CN INDEX NAME NOT YET ASSIGNED
- HO-NH-C N OMe
- RN 1071140-43-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

- RN 1071140-46-9 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carbonitrile, 1-(3,4-dimethoxyphenyl)-7,8-diethoxy-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 1071140-47-0 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

IT 1071141-34-8 1071141-79-1 1071141-87-1
 RL: RCT (Reactant); RACT (Reactant or reagent)

(starting material; preparation of benzodiazepine derivs. as adenosine transporter inhibitors useful in the treatment of psychotic diseases)

RN 1071141-34-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-3-(4,5-dihydro-2-thiazolyl)-4,5-dihydro-7,8-dimethoxy-4-methyl-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 1071141-79-1 CAPLUS
- CN 3H-2,3-Benzodiazepine, 3-(5-ethyl-1,3,4-thiadiazol-2-yl)-4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

- RN 1071141-87-1 CAPLUS
- CN 4H-1,3,4-Thiadiazin-5(6H)-one, 2-[4,5-dihydro-7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:796168 CAPLUS

DOCUMENT NUMBER: 147:269224

TITLE: Pharmaceutical compositions containing nitrogen containing heterocyclic compounds for treating

inflammatory disorders of the respiratory tract.

INVENTOR(S): Kurucz, Istvan; Solyom, Sandor; Csillik Perczel,

Viola; Toth, Szilveszter; Torok, Katalin; Horvaty,

Katalin; Simay, Antal; Karim Tapfer, Mariann; Nay,

Zoltan; Szekely, Jozsef Ivan

PATENT ASSIGNEE(S): Ivax Gyogyszerkutato Intezet Kft., Hung.

SOURCE: Hung. Pat. Appl., 46pp.

CODEN: HUXXCV
DOCUMENT TYPE: Patent
LANGUAGE: Hungarian

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

TENT NO.	KIND	DATE	APPLICATION NO.	DATE
2003000282	A2	20041129	HU 2003-282	20030204
2003000282	A3	20041228		
226376	B1	20081028		
	2003000282 2003000282	2003000282 A2 2003000282 A3	2003000282 A2 20041129 2003000282 A3 20041228	2003000282 A2 20041129 HU 2003-282 2003000282 A3 20041228

PRIORITY APPLN. INFO.:

AB The subject of the present invention is the application of AMPA receptor modulator compds. (such as benzodiazepines, quinoxaline derivs.) to prepare pharmaceutical compns. for the treatment of inflammatory diseases of the respiratory tracts in mammals. More exactly, the invention concerns pharmaceutical compns. that can be used for the treatment of inflammatory respiratory tracts diseases such as asthma and asthma-related diseases, as well as their preparation Expts. on dosing rats with talampanel and NBQX are reported.

IT 383857-61-2, SYM 2267

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(non-competitive AMPA receptor antagonist; pharmaceutical compns. containing nitrogen containing heterocyclic compds. for treating inflammatory

disorders of respiratory tract)

RN 383857-61-2 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-4,5-dihydro-7-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

L22 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:755669 CAPLUS

DOCUMENT NUMBER: 147:166354

TITLE: Process for preparation of chiral

dihydro-2,3-benzodiazepines as AMPA receptor

antagonists

Ling, Istvan; Barkoczy, Jozsef; Greff, Zoltan; INVENTOR(S): Szenasi, Gabor; Gigler, Gabor; Kertesz, Szabolcs;

Szuecs, Gyula; Albert, Mihaly; Kapus, Gabor; Szabo, Geza; Vegh, Miklos; Agoston, Marta; Levay, Gyoergy; Moricz, Krisztina; Harsing, Laszlo Gabor

PATENT ASSIGNEE(S): Egis Gyogyszergyar Nyrt., Hung.

SOURCE: PCT Int. Appl., 144pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT :	NO.			KIN	D	DATE		APPL			ICATION NO.				DATE		
WO	2007	0774	69		A1		2007	0712		WO	2006-	HU13	0		2	0061	229	
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL	, IN,	IS,	JP,	KE,	KG,	KM,	KN,	
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT	, LU,	LV,	LY,	MA,	MD,	MG,	MK,	
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO	, NZ,	OM,	PG,	PH,	PL,	PT,	RO,	
											, SV,	SY,	ТJ,	TM,	TN,	TR,	TT,	
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	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FI,	FR,	GB,	GR,	HU,	IE,	
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
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											2006-							
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 147:166354; MARPAT 147:166354 GI

- AB This invention provides four processes for the preparation of chiral dihydro-2,3-benzodiazepines I [wherein X = halo or alkoxy; Y = halo; or X and Y = methylenedioxy; R = alkyl.] or pharmaceutically acceptable salts thereof as AMPA receptor antagonists. For example, II was prepared via several stereoselective approaches. In spreading depression test, II showed antagonistic activity with EC50 of 1.8±0.1 µM against AMPA receptor. The compds. are useful neuroprotective agents for the treatment of stoke, spilepsy, schizophrenia, etc. (no data).
 - II 943964-01-0P 943964-02-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (drug candidate; preparation of chiral dihydro-2,3-benzodiazepines as AMPA
 - (drug candidate; preparation of chiral dinydro-2,3-benzodiazepines as AMPF receptor antagonists)

ΙI

- RN 943964-01-0 CAPLUS
- CN Ethanone, 1-[(4R)-1-(4-amino-3-methylphenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-vl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

- RN 943964-02-1 CAPLUS
- CN Ethanone, 1-[(4S)-1-(4-amino-3-methylphenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 943964-14-5P 943964-18-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of chiral dihydro-2,3-benzodiazepines as AMPA receptor antagonists)

RN 943964-14-5 CAPLUS

CN Ethanone, 1-[(4R)-8-chloro-4,5-dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 943964-18-9 CAPLUS

CN Ethanone, 1-[(4S)-8-chloro-4,5-dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

5 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L22 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:389016 CAPLUS

DOCUMENT NUMBER: 147:469380

TITLE: New substituted 2,3-benzodiazepine derivatives, their use and pharmaceutical compositions containing them

INVENTOR(S): Solyom, Sandor; Abraham, Gizella; Berzsenyi, Pal; Andrasi, Ferenc; Szabo, Hilda; Csuzdi, Emese; Hamori, Tamas; Kertesz, Mariusz; Csillikne, Perczel Viola; Horvath, Gyula; Kurucz, Istvan; Pallagi, Istvan; Toth,

Szilveszter; Toeroek, Katalin; Ling, Istvan

PATENT ASSIGNEE(S): Ivax Gyogyszerkutato Intezet Kft., Hung.

SOURCE: Hung. Pat. Appl., 96pp. CODEN: HUXXCV

DOCUMENT TYPE: Patent LANGUAGE . Hungarian

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

DAMENIE NO

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 2004000338 PRIORITY APPLN. INFO.:	A2	20060928	HU 2004-338 HU 2004-338	20040203
07				

The invention concerns the general formula 2,3-benzodiazepines I [R1, R2 = H, C1-3-alkyl; R3 = (un)substituted C5-6-aromatic, saturated or partially saturated

heterocycle containing at least 2 heteroatoms, in which, as heteroatom, there may be oxygen, sulfur or nitrogen atom and in case the heterocycle contains 2 heteroatoms, one of the heteroatoms must be something other than nitrogen atom; R4, R5, R6, R7, R8 = H, C1-3-alkyl, halogen, NO2, NH2, NH(C1-3-alkyl), N(C1-3-alkyl)2, C2-5-acyl, (C2-5-alkoxy)carbonyl, C2-5-alkylaminocarbonyl; R9 = C1-3-alkoxy, halogen; R10 = H, halogen; R9R10 = C1-3-alkylenedioxy] and their isomers and acid addition salts. Thus, (±)-5-(4-aminophenyl)-8-methyl-7-(2-thiazolyl)-8,9-dihydro-7H-1,3dioxolo[4,5-h][2,3]benzodiazepine I [R1 = R4 = R5 = R7 = R8 = H, R2 = Me, R3 = thiazol-2-yl, R6 = NH2, R9R10 = OCH20] was prepared from (±)-8-Methyl-5-(4-nitrophenyl)-8,9-dihydro-7H-1,3-dioxolo[4,5h][2,3]benzodiazepine (II) via thiocarbamylation with potassium thiocyanate in AcOH, cyclocondensation with BrCH2CH(OEt)2 in DMF, and reduction with H2NNH2·H2O in MeOH/CH2C12 containing catalytic RaNi. The

invention includes the pharmaceutical compns. that contain the above compds. I, the application of the compds. and the production of pharmaceutical products to treat neurodegenerative diseases. The pharmacol. activity of I was determined

T 732277-95-1P 732277-96-2P 732277-97-3P 732277-98-4P 732277-99-5P 732278-00-1P 732278-12-5P 732278-14-7P 732278-18-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(new substituted 2,3-benzodiazepine derivs., their use and pharmaceutical compns. containing them)

RN 732277-95-1 CAPLUS

CN Benzenamine, 4-[4,5-dihydro-8-methoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 732277-96-2 CAPLUS

CN Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

RN 732277-97-3 CAPLUS

CN Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

732277-98-4 CAPLUS RN

Benzenamine, 4-[8-chloro-3-(4,5-dihydro-2-thiazoly1)-4,5-dihydro-4-methyl-CN 3H-2,3-benzodiazepin-1-v1]- (CA INDEX NAME)

732277-99-5 CAPLUS RN

CN 4(5H)-Thiazolone, 2-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN

 $732278-00-1 \quad CAPLUS \\ \text{Benzenamine, } 4-[7,8-\text{dichloro}-4,5-\text{dihydro}-4-\text{methyl}-3-(4-\text{methyl}-2-\text{thiazolyl})-1-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{$ CN 3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- 732278-12-5 CAPLUS RN
- CN Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

- 732278-14-7 CAPLUS RN
- CN Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- RN
- 732278-18-1 CAPLUS Benzenamine, 4-[4,5-dihydro-8-methoxy-4-methyl-3-(5-methyl-1,3,4-methyl-3-(5-methyl-1,3,4-methyl-3-(5-methyl-1,3,4-methyl-3-(5-methyl-1,3,4-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-mCN thiadiazol-2-y1)-3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

IT 732277-25-7P 732277-26-8P 732277-27-9P 732277-28-0P 732277-30-4P 732277-45-1P 732277-47-3P 732277-53-1P 952602-33-4P RI: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(new substituted 2,3-benzodiazepine derivs., their use and pharmaceutical compns. containing them)

RN 732277-25-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

RN 732277-26-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

RN 732277-27-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-28-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-3-(4,5-dihydro-2-thiazolyl)-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-30-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 7,8-dichloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-45-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

RN 732277-47-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-53-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 952602-33-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-3-(4,5-dihydro-3-oxido-2-thiazoly1)-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

IT 732276-83-4P 732276-90-3P 732276-91-4P 923272-51-9P 923272-53-1P 923272-54-2P 952603-81-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(Reactant of Teagent)

(preparation and cyclocondensation reactions of; new substituted 2,3-benzodiazepine derivs., their use and pharmaceutical compns. containing them)

RN 732276-83-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{Br} \\ \text{H}_2\text{N}-\text{C} & \text{N} \\ \text{S} & \text{N} \\ \end{array}$$

RN 732276-90-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732276-91-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 923272-51-9 CAPLUS

3H-2,3-Benzodiazepine-3-carbothioamide, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

CN

RN 923272-53-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, hydrazide (CA INDEX NAME)

RN 923272-54-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid,
7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-, hydrazide (CA INDEX NAME)

RN 952603-81-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide,

 $7, 8- \texttt{dichloro-4}, 5- \texttt{dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-} \quad \texttt{(CA INDEX NAME)}$

$$\begin{array}{c|c} \text{Me} & \text{C1} \\ \text{H}_2\text{N-C} & \text{N} \\ \text{S} & \text{N} \end{array}$$

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ACCESSION NUMBER: 2007:240866 CAPLUS

DOCUMENT NUMBER: 146:482098

TITLE: New 2,3-benzodiazepine derivatives and pharmaceutical

compositions containing them

INVENTOR(S): Berzsenyi, Pal; Ling, Istvan; Tarnawa, Istvan;

Abraham, Gizella; Solyom, Sandor; Andrasi, Ferenc; Hamori, Tamas; Csuzdi, Emese; Horvath, Katalin; Gal,

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PATENT ASSIGNEE(S): Egis Gyogyszergyar Rt., Hung.

SOURCE: Hung. Pat. Appl., 42pp.

CODEN: HUXXCV

LANGUAGE: Hungarian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
HU 9700688	A2	19980330	HU 1997-688	19970402	
HU 9700688	A3	19980428			
PRIORITY APPLN. INFO.:			HU 1997-688	19970402	
OTHER SOURCE(S):	MARPAT	146:482098			
HU 9700688 PRIORITY APPLN. INFO.:	A3	19980428			

GI

AB The subject of the invention is 2,3-benzodiazepine derivs. I [R1, R2 = H, halogen, Cl-4-alkyl, Cl-4-alkoyx, No2, CP3, NRRB; R8, R8, 9 = H, COR10; R10 = H, Cl-6-alky, C6-10-aryl, Cl-4-alkoxy, C3-5-cycloalkyl, C2-6-alkenyl, C3-5-cycloalkoxy, NRIR12; R11, R12 = H, Cl-4-alkyl, C3-5-cycloalkyl, C6-10-aryl; R3 = Cl-4-alkyl, C3-5-cycloalkyl, CR13; R13 = R10; R4, R5 = H, Cl-3-alkyl; R6, R7 = H, Cl, Br, with the restriction that if either R6 or R7 = H, then the other is notl and II with AMPA antagonist effect. The invention also includes the isomers of I and II, their acid addition salts, the pharmaceutical compos. made out of these and the general formula pharmaceutically active compds. Thus, 3-acetyl-7-cnloro-4-methyl-4,5-dihydro-3H-2,3-benzodiazepin [I; R1 = NH2-4, R2 = R4 = R7 = H, R3 = COMe, R5 = Me, R6 = Br (III)] was prepared

NH2-4, R2 = R4 = R7 = H, R3 = COMe, R5 = Me, R6 = Br (III)] was prepared from 4-02NC6H4CH0 via cyclocondensation with 3-C1C6H4CH2CHMeOH, aromatization with Jones reagent, reaction with hydrazine hydrate, reduction with NaBH4, acetylation with Ac20, and hydrogenolysis with Ranel Ni. The

AMPA antagonistic activity of III was determined [IC50 = 3.2 μ M].

TT 200419-04-1P 200419-06-3P 200419-08-5P 200419-10-9P 200419-12-1P 200419-13-2P

RN

CM

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200419-18-7P
200419-14-3P
                 200419-16-5P
200419-20-1P
                 200419-21-2P
                                  200419-22-3P
200419-24-5P
                 200419-26-7P
                                  200419-28-9P
200419-30-3P
                 200419-34-7P
                                  200419-37-0P
200419-40-5P
                 200419-44-9P
                                  200419-48-3P
200419-52-9P, (-)-3-Acetyl-1-(4-aminophenyl)-8-chloro-4-methyl-4,5-
dihydro-3H-2,3-benzodiazepin
                               200419-55-2P
200419-57-4P
                 200419-59-6P
                                  200419-63-2P
935656-67-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (new 2,3-benzodiazepine derivs. and pharmaceutical compns. containing them)
200419-04-1 CAPLUS
Ethanone, 1-[1-(4-aminophenyl)-7-chloro-4,5-dihydro-4-methyl-3H-2,3-
benzodiazepin-3-y1]- (CA INDEX NAME)
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- RN 200419-06-3 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-7-chloro-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

- RN 200419-08-5 CAPLUS
- CN Ethanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-10-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

RN 200419-12-1 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-13-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 7,8-dichloro-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-14-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

RN 200419-16-5 CAPLUS

CN

3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 200419-18-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-, ethyl ester (CA INDEX NAME)

RN 200419-20-1 CAPLUS
CN 3H-2,3-Benzodlazepine-3-carboxamide,
1-(4-aminophenyl)-N-butyl-8-chloro-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 200419-21-2 CAPLUS
CN Ethanone, 1-[8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-v1]- (CA INDEX NAME)

RN 200419-22-3 CAPLUS
CN Ethanone, 1-[1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-24-5 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]-2,2,2-trifluoro- (CA INDEX NAME)

RN 200419-26-7 CAPLUS

CN 1-Propanone, 1-[1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-28-9 CAPLUS

CN Methanone, [1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

RN 200419-30-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-bromo-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

RN 200419-34-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-, ethyl ester (CA INDEX NAME)

NH2

RN 200419-37-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminopheny1)-8-bromo-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 200419-40-5 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]-2,2,2-trifluoro- (CA INDEX NAME)

RN 200419-44-9 CAPLUS

CN 1-Propanone, 1-[1-(4-aminopheny1)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-v1]- (CA INDEX NAME)

RN 200419-48-3 CAPLUS

CN Methanone, [1-(4-aminopheny1)-8-chloro-4,5-dihydro-4-methy1-3H-2,3-

benzodiazepin-3-y1]cyclopropy1- (CA INDEX NAME)

RN 200419-52-9 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]-, (-)- (CA INDEX NAME)

Rotation (-).

RN 200419-55-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-N-ethyl-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 200419-57-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-N-propyl- (CA INDEX NAME)

RN 200419-59-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-N-(1-methylethyl)- (CA INDEX NAME)

RN 200419-63-2 CAPLUS

CN 1-Butanone, 1-[1-(4-aminopheny1)-7,8-dichloro-4,5-dihydro-4-methy1-3H-2,3-benzodiazepin-3-y1]- (CA INDEX NAME)

RN 935656-67-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminopheny1)-7,8-dichloro-4,5-dihydro-4-methy1-N-(1-methy1ethy1)-(CA INDEX NAME)

IT 200419-87-0P, (+)-8-Chloro-4-methyl-1-(4-nitrophenyl)-4,5dihydro-3H-2,3-benzodiazepin
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation and acetylation of; new 2,3-benzodiazepine derivs. and pharmaceutical compns. containing them)

RN 200419-87-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, (+)- (CA INDEX NAME)

Rotation (+).

- IIT 935656-68-1P, 7-Chloro-4-methyl-1-(4-nitrophenyl)-4,5-dihydro-3H-2,3-benzodiazepin 935656-70-5P,
 - 7,8-Dichloro-4-methyl-1-(4-nitrophenyl)-4,5-dihydro-3H-2,3-benzodiazepine RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and acetylation or carbamylation of; new 2,3-benzodiazepine derivs. and pharmaceutical compns. containing them)

RN 935656-68-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 7-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-(CA INDEX NAME)

RN 935656-70-5 CAPLUS

CN 3H-2,3-Benzodiazepine, 7,8-dichloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)(CA INDEX NAME)

IT 935656-72-7P, 8-Bromo-4-methyl-1-(4-nitrophenyl)-4,5-dihydro-3H-

2,3-benzodiazepin

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and acylation of; new 2,3-benzodiazepine derivs. and

pharmaceutical compns. containing them)

RN 935656-72-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-(CA INDEX NAME)

IT 935656-69-2P, 8-Chloro-4-methyl-1-(4-nitrophenyl)-4,5-dihydro-3H-2,3-benzodiazepin

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and acylation or carbamylation of; new 2,3-benzodiazepine derivs. and pharmaceutical compns. containing them)
RN 935656-69-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-(CA INDEX NAME)

IT 200419-67-6P, 7-Chloro-4-methyl-1-(4-nitrophenyl)-5H-2,3benzodiazepin 200419-71-2P,

8-Chloro-4-methyl-1-(4-nitrophenyl)-5H-2,3-benzodiazepin 200419-73-4P, 7,8-Dichloro-4-methyl-1-(4-nitrophenyl)-5H-2,3-

benzodiazepine 200419-84-7P,

 $8-{\tt Bromo-4-methyl-1-(4-nitrophenyl)-5H-2,3-benzodiazepin}$

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and borohydride reduction of; new 2,3-benzodiazepine derivs.

and pharmaceutical compns. containing them)

RN 200419-67-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 7-chloro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-71-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 8-chloro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-73-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dichloro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-84-7 CAPLUS

CN 5H-2, 3-Benzodiazepine, 8-bromo-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation and hydrogenolysis of; new 2,3-benzodiazepine derivs. and pharmaceutical compns. containing them)

RN 200419-03-0 CAPLUS

CN Ethanone, 1-[7-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-05-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 7-chloro-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-07-4 CAPLUS

CN Ethanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-09-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-11-0 CAPLUS

CN Ethanone, 1-[7,8-dichloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-15-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} Me & & \\ H_2N-C & N & \\ O & N & \\ \end{array}$$

RN 200419-19-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, N-butyl-8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-25-6 CAPLUS

CN 1-Propanone, 1-[8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-27-8 CAPLUS

CN Methanone, [8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

RN 200419-29-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-bromo-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-36-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-38-1 CAPLUS

CN Ethanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-2,2,2-trifluoro- (CA INDEX NAME)

RN 200419-42-7 CAPLUS

CN 1-Propanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-46-1 CAPLUS

CN Methanone, [8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

RN 200419-50-7 CAPLUS

CN Ethanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-, (+)- (CA INDEX NAME)

Rotation (+).

RN 200419-54-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-N-ethyl-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-56-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-N-propyl- (CA INDEX NAME)

RN 200419-58-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-4,5-dihydro-4-methyl-N-(1-methylethyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-60-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 7,8-dichloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, ethyl ester (CA INDEX NAME)

RN 200419-62-1 CAPLUS

CN 1-Butanone, 1-[7,8-dichloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

IT 200419-23-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation and hydrogenolysis or N-acylation of; new 2.3-benzodiazepine derivs. and pharmaceutical compns. containing them)

RN 200419-23-4 CAPLUS

CN Ethanone, 1-[8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3benzodiazepin-3-v1]-2,2,2-trifluoro- (CA INDEX NAME)

IT 200419-32-5P

> RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation and hydrogenolysis or decarbamylation of; new

2,3-benzodiazepine derivs. and pharmaceutical compns. containing them) RN

200419-32-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, ethyl ester (CA INDEX NAME)

IT 200419-17-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation and hydrogenolysis or decarboxylation of; new 2,3-benzodiazepine derivs. and pharmaceutical compns. containing them) N 200419-17-6 CAPLUS

RN 200419-17-6 CAPLUS CN 3H-2,3-Benzodiazepine-3-carboxylic acid,

8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, ethyl ester (CA INDEX NAME)

L22 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:119526 CAPLUS

DOCUMENT NUMBER: 146 - 206341

TITLE: Novel substituted 2,3-benzodiazepine derivatives as AMPA antagonists and their preparation, pharmaceutical

compositions, and use in the treatment of diseases INVENTOR(S): Solvom, Sandor; Abraham, Gizella; Hamori, Tamas; Berzsenvl, Pal; Andrasi, Fenrec; Kurucz, Istvan

IVAX Drug Research Institute, Ltd., Hung. PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 40 pp., Cont.-in-part of U.S.

Ser. No. 358,053.

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	. DATE			
US 20070027143	A1	20070201	US 2004-771847	20040203			
US 20040152693	A1	20040805	US 2003-358053	20030204			
US 6858605	B2	20050222					
RIORITY APPLN. INFO.:			US 2003-358053	A2 20030204			
SSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY	FORMAT			

CASREACT 146:206341: MARPAT 146:206341 OTHER SOURCE(S):

PI

The invention relates to 2,3-benzodiazepine derivs. of formula I, isomers AB and acid addition salts thereof and to pharmaceutical compns. containing the same, as well as to pharmaceutical compns, and methods of using the same suitable for treating conditions associated with muscle spasms, epilepsy, acute and chronic forms of neurodegenerative diseases as well as preventing, treating or alleviating the symptoms of acute and chronic inflammatory disorders. Compds. of formula I wherein, R3 is (un) substituted (un) saturated 5- to 6-membered (hetero) arvl; R4 - R7 is H, halo, C1-3 alkyl, NO2, NH2 and derivs., etc.; R9 is C1-3 alkoxy, and halo; R10 is H and halo; R9R10 together is C1-3 alkylenedioxy; and their stereoisomers and acid-addition salts thereof, are claimed. Example compound II was prepared by cyclization of (±)-8-methyl-5-(4-nitrophenyl)-7thiocarbamoy1-8,9-dihydro-7H-1,3-dioxolo[4,5-h][2,3]benzodiazepine with bromoacetaldehyde di-Et acetal. All the invention compds. were evaluated

II

for their AMPA antagonistic activity (data given). IT 732277-25-7P 732277-26-8P 732277-27-9P

732277-28-0F 732277-29-1F 732277-30-4F 732277-39-4F 732277-39-4F 732277-39-4F 732277-39-4F 732277-95-1P 732277-95-2P 732277-95-4P 732277-95-5P 732278-00-1P 732278-12-5P 732278-14-7P 732278-12-5P

923271-76-5P /32278-14-7P /3227

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of substituted 2,3-benzodiazepine derivs. as AMPA antagonists and their use in the treatment of diseases)

RN 732277-25-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

- RN 732277-26-8 CAPLUS
- CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

- RN 732277-27-9 CAPLUS
- CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-28-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-3-(4,5-dihydro-2-thiazoly1)-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-29-1 CAPLUS

CN 4(5H)-Thiazolone, 2-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 732277-30-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 7,8-dichloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-45-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

RN 732277-47-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-53-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-95-1 CAPLUS

Benzenamine, 4-[4,5-dihydro-8-methoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-CN benzodiazepin-1-yl]- (CA INDEX NAME)

732277-96-2 CAPLUS RN

Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(2-thiazolyl)-3H-2,3-CN benzodiazepin-1-v1]- (CA INDEX NAME)

RN

732277-97-3 CAPLUS Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-3H-CN 2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

732277-98-4 CAPLUS RN

Benzenamine, 4-[8-chloro-3-(4,5-dihydro-2-thiazoly1)-4,5-dihydro-4-methyl-CN 3H-2,3-benzodiazepin-1-v1]- (CA INDEX NAME)

732277-99-5 CAPLUS RN

CN 4(5H)-Thiazolone, 2-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN

 $732278-00-1 \quad CAPLUS \\ \text{Benzenamine, } 4-[7,8-\text{dichloro}-4,5-\text{dihydro}-4-\text{methyl}-3-(4-\text{methyl}-2-\text{thiazolyl})-1-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{methyl}-3-(4-\text{$ CN 3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- 732278-12-5 CAPLUS RN
- CN Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

- 732278-14-7 CAPLUS RN
- CN Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

- RN
- 732278-18-1 CAPLUS Benzenamine, 4-[4,5-dihydro-8-methoxy-4-methyl-3-(5-methyl-1,3,4-methyl-3-(5-methyl-1,3,4-methyl-3-(5-methyl-1,3,4-methyl-3-(5-methyl-1,3,4-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-methyl-3-(5-mCN thiadiazol-2-y1)-3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN 923271-76-5 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-3-(5-methyl-1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

IT 732276-83-4P 732276-90-3P 732276-91-4P 923272-51-9P 923272-53-1P 923272-54-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of substituted 2,3-benzodiazepine derivs. as AMPA antagonists and their use in the treatment of diseases)

RN 732276-83-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{Br} \\ \text{H}_2\text{N}-\text{C} & \text{N} \\ \text{S} & \text{N} \\ \end{array}$$

RN 732276-90-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732276-91-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 923272-51-9 CAPLUS

3H-2,3-Benzodiazepine-3-carbothioamide, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

CN

$$\begin{array}{c|c} & & & \\ \text{Me} & & & \\ \text{H}_2\text{N} - \text{C} & & \\ \text{S} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 923272-53-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, hydrazide (CA INDEX NAME)

RN 923272-54-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid,
7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-, hydrazide (CA INDEX NAME)

IT 194671-84-6 935656-69-2 1201945-16-5
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of substituted 2,3-benzodiazepine derivs. as AMPA antagonists and their use in the treatment of diseases)

RN 194671-84-6 CAPLUS

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 935656-69-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-(CA INDEX NAME)

RN 1201945-16-5 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

L22 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:1330065 CAPLUS

DOCUMENT NUMBER: 146:229312

TITLE: Synthesis of 8,9-dialkoxybenzodiazepines and

7,8-dialkoxyisoquinolines

AUTHOR(S): Pongo, Laszlo; Agai, Bela; Faigl, Ferenc; Reiter,

Jozsef; Simig, Gyula

CORPORATE SOURCE: Chemical Research Division, Egis Pharmaceuticals Ltd.,

Budapest, H-1475, Hung.

SOURCE: Journal of Heterocyclic Chemistry (2006), 43(6),

1539-1547

CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation

DOCUMENT TYPE: Journal

LANGUAGE: English

Ι

OTHER SOURCE(S): CASREACT 146:229312

AB O-Aroylarylacetone type 1,5-diketone derivs. were synthesized from arylacetones protected as 1,3-dioxolanes through directed ortho lithiation followed by acylation with aroyl chlorides. 8,9-Dialkoxy-2,3-benzodiazepines, e.g., I, were obtained by cyclization of diketones with hydrazine. The reaction of diketones with ammonia gave

of diketones with hydrazine. The reaction of diketones with ammonia gave 7,8-dialkoxyisoquinolines. Reaction of ketals with hydrazine

hydrochloride and hydroxylamine hydrochloride afforded N-amino-7,8-dialkoxyisoquinolinium chlorides and

7,8-dialkoxyisoquinolinium oxides, resp. 924280-14-8P 924280-15-9P 924280-16-0P

IT 924280-14-8P 924280-15-9P 924280-16-0P 924280-17-1P 924280-18-2P 924280-19-3P 924280-20-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of (aryl)methylbenzodiazepines via acetalization of arylacetones followed by aroylation with aroyl chlorides, hydrolysis and cyclization with hydrazine)

RN 924280-14-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 8,9-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 924280-15-9 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-fluoropheny1)-8,9-dimethoxy-4-methyl- (CA INDEX NAME)

RN 924280-16-0 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-fluoropheny1)-8,9-dimethoxy-4-methy1- (CA INDEX NAME)

RN 924280-17-1 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chloropheny1)-8,9-dimethoxy-4-methyl- (CA INDEX NAME)

RN 924280-18-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chloropheny1)-8,9-dimethoxy-4-methy1- (CA INDEX NAME)

RN 924280-19-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-chloropheny1)-8,9-dimethoxy-4-methyl- (CA INDEX NAME)

RN 924280-20-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2,4-dichloropheny1)-8,9-dimethoxy-4-methyl- (CA INDEX NAME)

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:120900 CAPLUS

DOCUMENT NUMBER: 142:219316

TITLE: Process for the preparation of

8-chloro-2,3-benzodiazepine derivatives with

AMPA/kainate receptor inhibiting activity
INVENTOR(S): Barkoczy, Jozsef; Ling, Istvan; Simig, Gyula

INVENTOR(S): Barkoczy, Jozsef; Ling, Istvan; Simig, Gyula; Szenasi,
Gabor; Gigler, Gabor; Kertesz, Szabolcs; Szuecs,

Gvula; Szabo, Geza; Vegh, Miklos; Harsing, Laszlo

Gabor

PATENT ASSIGNEE(S): Egis Gyogyszergyar Rt, Hung.

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.																		
WO 2005012265																0040	729	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KE,	KG,	KP,	KR,	KZ,	LC	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	MZ,	NA,	NI	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	, sc,	SD,	SE,	SG,	SK,	SL,	SY	
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US	, UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD	, SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM	
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HU	2003	0024	49		A2 20050428						2003-	20030804						
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AU	2004	2614	91		A1		2005	0210	AU 2004-261491						20040729			
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CA	2534	458			A1		2005	0210	CA 2004-2534458						20040729			
EP	1660	462			A1		2006	0531	EP 2004-769081						20040729			
EP	1660	462			B1		2008	1119										
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	APP									HU :	2003-	2449			A 2	0030	804	
										140	2004-	111102			14 2	0040	720	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 142:219316; MARPAT 142:219316

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to new 8-chloro-2, 3-benzodiazepine derivs. I [R = C1-4-alkyl (especially, Me or Et), NRR; R' = C1-6-alkyl, C3-7-cyclolkyl] pharmaceutically acceptable acid addition salts thereof. The invention algoes encompasses a process for the preparation of said compds., pharmaceutical compns. containing them and new intermediates useful for the preparation of the new

e new 8-chloro-2,3-benzodiazepine derivs. The said process comprises: (a) reducing nitrophenyl-2,3-benzodiazepine derivs. II; or (b) amidation of carboxylic acid derivs. III (f = leaving group; Z = NHZ, NO2) with NHZR; (c) III (Z = NO2) is prepared from 8-chloro-2,3-benzodiazepine IV. Thus, amide I (R = NHMe) was prepared from 8-chloro-2,3-benzodiazepine via alkoxycarbonylation with ClCO2Ph, amidation with MeNH2, and reduction with Raney Ni. The compds. according to the invention possess ANPA/kainate receptor inhibiting activity. The bioactivity of I (R = NHMe) was determined [neuroprotective effect = -5 at 0.1 mg/kg i.p. against permanent focal cerebral ischemia in mice; EDSO = 4.1 0.1 mg/kg i.p. in maximal electroshock test in mice; BWG = +9.9 q in toxicity test in rate].

IT 840526-71-8, 8-Chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-5H-2,3benzodiazepine

RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation and alkoxycarbonylation of; preparation of
8-chloro-2,3-benzodiazepine derivs. with AMPA/kainate receptor
inhibiting activity)

840526-71-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 8-chloro-4-methyl-1-(3-methyl-4-nitrophenyl)- (CA INDEX NAME)

DΝ

IT 840526-62-7P, 3-Acetyl-8-chloro-4-methyl-1-(3-methyl-4nitrophenyl)-3H-2,3-benzodiazepine 840526-63-8P,
8-Chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-3-propionyl-3H-2,3benzodiazepine

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reduction of; preparation of 8-chloro-2,3-benzodiazepine derivs.

with AMPA/kainate receptor inhibiting activity)

RN 840526-62-7 CAPLUS

CN Ethanone, 1-[8-chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-vl)- (CA INDEX NAME)

RN 840526-63-8 CAPLUS

CN 1-Propanone, 1-[8-chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3benzodiazeoin-3-vll- (CA INDEX NAME)

IT 840526-67-2P, 3-Acetyl-1-(4-amino-3-methylphenyl)-8-chloro-4methyl-1-3H-2,3-benzodiazepine 840526-68-3P,
1-(4-Amino-3-methylphenyl)-8-chloro-4-methyl-3-propionyl-2,3benzodiazepine 840526-69-4P,
1-(4-Amino-3-methylphenyl)-8-chloro-4-methyl-3H-2,3-benzodiazepine-3carboxylic acid N-methylamide 840526-70-7P,
1-(4-Amino-3-methylphenyl)-8-chloro-4-methyl-3H-2,3-benzodiazepine-3carboxylic acid N-cyclopropylamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of 8-chloro-2,3-benzodiazepine derivs. with AMPA/kainate

(preparation of 8-chioro-2,3-benzodiazepine derivs. With AMPA/Kainat receptor inhibiting activity)

RN 840526-67-2 CAPLUS

CN Ethanone, 1-[1-(4-amino-3-methylphenyl)-8-chloro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 840526-68-3 CAPLUS

CN 1-Propanone, 1-[1-(4-amino-3-methylphenyl)-8-chloro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 840526-69-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3-methylphenyl)-8-chloro-N,4-dimethyl- (CA INDEX NAME)

RN 840526-70-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-amino-3-methylphenyl)-8-chloro-N-cyclopropyl-4-methyl- (CA INDEX NAME)

IT 840526-64-9F, 8-Chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepine-3-carboxylic acid phenyl ester 840526-65-0P, 8-Chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepine-3-carboxylic acid N-methylamide 840526-66-1P, 8-Chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepine-3-carboxylic acid N-cyclopropylamide R1: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of 8-chloro-2,3-benzodiazepine derivs. with AMPA/kainate

receptor inhibiting activity)
RN 840526-64-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 8-chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-, phenyl ester (CA INDEX NAME)

RN 840526-65-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-N,4-dimethyl-1-(3-methyl-4-nitrophenyl)- (CA INDEX NAME)

RN 840526-66-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-N-cyclopropyl-4-methyl-1-(3-methyl-4-nitrophenyl)- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:633283 CAPLUS

DOCUMENT NUMBER: 141:167770

TITLE: Methods and compositions for treating inflammatory

disorders of the airways

benzodiazepin-3-yl]- (CA INDEX NAME)

INVENTOR(S): Kurucz, Istvan; Solyom, Sandor; Perczel, Viola Csillik

Nee PATENT ASSIGNEE (S): Huna.

U.S. Pat. Appl. Publ., 20 pp. SOURCE:

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIN	IND DATE				APPL							
US 20 WO 20	US 20040152694 WO 2004069195 WO 2004069195					A2 20040819			US 2	003-		20030204				
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	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,
	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,
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L22 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:633282 CAPLUS

DOCUMENT NUMBER: 141:174197

TITLE: A preparation of novel substituted 2,3-benzodiazepine

derivatives, useful as AMPA receptor antagonists INVENTOR(S): Solyom, Sandor; Abraham, Gizella; Hamori, Tamas; Berzsenvi, Pal; Andrasi, Ferenc; Kurucz, Istvan

Ivax Drug Research Institute, Ltd., Hung. PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 29 pp.

CODEN: USXXCO DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

	PATENT NO.									APP	LICAT	ION	DATE						
US	2004	0152	693		A1		2004			US	2003-		20030204						
	6858	605			B2		2005												
	2004						2004						20040203						
	2512				A1										20040203				
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BR	2004	0072	47		A		20060131 BR 2004-7247								20040203				
CN	1747	938			A		2006	0315		CN	2004-	8000	20040203 20040203						
JP	2006	5166	47		T														
	2005						2007	0131		ZA	2005-	5352		20040203					
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										WO	2004-1	JS30	41	1	W 2	0040	203		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 141:174197

GI

AB The invention relates to a preparation of new 2,3-benzodiazepine derivs. of formula I (wherein: Rl and R2 are independently selected from H or Cl-3alkyl, R3 is (un)substituted 5- or 6-membered ring containing at least 2 heteroatoms; R6 is (un)substituted phenyl; R4 is H or halogen; R5 is Cl-3alkoxy or halogen; R4 and R5 together can be Cl-3alkylendioxy group) as AMPA receptor antagonists, useful for the treatment of conditions associated with muscle spasms, epilepsy, acute and chronic forms of neurodegenerative diseases as well as preventing, treating or alleviating the symptoms of acute and chronic inflammatory disorders. For instance, prepared compound II (IC50 = 1-5 µM) inhibit AMPA-induced "spreading depression" in isolated chicken retina (table 1, example 61). Muscle relaxant activity in mice of the compound II was determined (inclined screen

was 10.7 mg/kg; table 4, example 61).

732276-78-7P 732276-83-4P 732276-90-3P 732276-91-4P 732276-94-7P 732276-95-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of novel substituted 2,3-benzodiazepine derivs., useful as AMPA receptor antagonists)

RN 732276-78-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide,

7,8-dichloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{C1} \\ \text{H}_2\text{N-C} & \text{N} & \text{C1} \\ \text{S} & \text{N} & \text{NO}_2 \end{array}$$

RN 732276-83-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioamide, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} & \text{Br} \\ \text{H}_2\text{N-C} & \text{N} \\ \text{S} & \text{N} \\ \end{array}$$

RN 732276-90-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732276-91-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioyl chloride, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732276-94-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, hydrazide, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 732276-95-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carbothioic acid, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-, hydrazide, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

732277-25-7P 732277-26-8P 732277-27-9P 732277-29-1P 732277-28-0P 732277-30-4P 732277-45-1P 732277-47-3P 732277-53-1P 732277-95-1P 732277-96-2P 732277-97-3P 732277-98-4P 732277-99-5P 732278-00-1P 732278-12-5P 732278-14-7P 732278-18-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel substituted 2,3-benzodiazepine derivs., useful as AMPA receptor antagonists)

RN 732277-25-7 CAPLUS

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

RN 732277-26-8 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3-(2-thiazolyl)- (CA INDEX NAME)

RN 732277-27-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-28-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-3-(4,5-dihydro-2-thiazolyl)-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-29-1 CAPLUS

CN 4(5H)-Thiazolone, 2-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 732277-30-4 CAPLUS

CN 3H-2,3-Benzodiazepine, 7,8-dichloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 732277-45-1 CAPLUS

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3-(1,3,4-thiadiazol-2-yl)- (CA INDEX NAME)

732277-47-3 CAPLUS RN

CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-3-(5-methyl-1,3,4thiadiazol-2-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

732277-53-1 CAPLUS RN

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-3-(5-methyl-1,3,4-thiadiazol-2-yl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN

732277-95-1 CAPLUS Benzenamine, 4-[4,5-dihydro-8-methoxy-4-methyl-3-(2-thiazolyl)-3H-2,3-(2-thiazolyl)CN benzodiazepin-1-y1]- (CA INDEX NAME)

732277-96-2 CAPLUS RN

CN Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(2-thiazolyl)-3H-2,3benzodiazepin-1-v1]- (CA INDEX NAME)

732277-97-3 CAPLUS RN

Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-3H-CN 2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN

 $732277-98-4 \quad CAPLUS \\ \text{Benzenamine, } 4-[8-\text{chloro-}3-(4,5-\text{dihydro-}2-\text{thiazolyl})-4,5-\text{dihydro-}4-\text{methyl-} \\ \text{Capture} \\ \text$ CN 3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN 732277-99-5 CAPLUS

CN 4(5H)-Thiazolone, 2-[1-(4-aminopheny1)-8-chloro-4,5-dihydro-4-methy1-3H-2,3-benzodiazepin-3-y1]- (CA INDEX NAME)

732278-00-1 CAPLUS RN

Benzenamine, 4-[7,8-dichloro-4,5-dihydro-4-methyl-3-(4-methyl-2-thiazolyl)-CN 3H-2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN

732278-12-5 CAPLUS
Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(1,3,4-thiadiazol-2-yl)-3H-CN 2,3-benzodiazepin-1-y1]- (CA INDEX NAME)

RN 732278-14-7 CAPLUS

Benzenamine, 4-[8-chloro-4,5-dihydro-4-methyl-3-(5-methyl-1,3,4-thiadiazol-CN 2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

732278-18-1 CAPLUS RN

CN Benzenamine, 4-[4,5-dihydro-8-methoxy-4-methyl-3-(5-methyl-1,3,4thiadiazol-2-yl)-3H-2,3-benzodiazepin-1-yl]- (CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT:

THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS

61 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L22 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:551645 CAPLUS

DOCUMENT NUMBER: 141:405636

TITLE: Advanced pharmacophore model of non-competitive AMPA

antagonist 2,3-benzodiazepines

AUTHOR(S): Rezessy, B.; Solyom, S.

CORPORATE SOURCE: IVAX Drug Research Institute Ltd., Budapest, H-1045, Huna.

SOURCE: Letters in Drug Design & Discovery (2004), 1(3),

217-223

CODEN: LDDDAW; ISSN: 1570-1808

PUBLISHER: Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal English

LANGUAGE:

Detailed SAR examination and DIStance COmparison (DISCO) computation were used AR for identification and superposition of common structural features of 2,3-benzodiazepines with high affinity to an allosteric AMPA binding site. Two similar 4-point models were identified; both contained 2 donor sites,

a donor atom and a hydrophobic center. At one of the donor sites a characteristic difference between the two models was observed

194671-92-6 194672-09-8 200419-08-5 200419-14-3 383857-79-2 792943-03-4

> 792943-04-5 792943-05-6 792943-09-0 792943-10-3 792948-59-5

RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(advanced pharmacophore model of non-competitive AMPA antagonist 2.3-benzodiazepines)

RN 194671-92-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminophenyl)-4,5-dihydro-8-methoxy-N,4-dimethyl- (CA INDEX NAME)

RN 194672-09-8 CAPLUS

Methanone, [1-(4-aminophenyl)-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3vl]cvclopropvl- (CA INDEX NAME)

RN 200419-08-5 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-14-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

RN 383857-79-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-7-methoxy-N,4-dimethyl- (CA INDEX NAME)

RN 792943-03-4 CAPLUS

CN Benzenamine, 4-(7,8-dichloro-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

RN 792943-04-5 CAPLUS

CN Benzenamine, 4-(8-bromo-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

RN 792943-05-6 CAPLUS

CN Benzenamine, 4-(7-chloro-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

RN 792943-09-0 CAPLUS

CN Methanone, [1-(4-minopheny1)-8-chloro-4-methy1-3H-2,3-benzodiazepin-3-yl]cyclopropy1- (CA INDEX NAME)

RN 792943-10-3 CAPLUS

CN 1-Propanone, 1-[1-(4-aminophenyl)-7,8-dichloro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 792948-59-5 CAPLUS

CN Ethanone, 1-[(4R)-1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT:

6

- REFERENCE COUNT:
- THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
- 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:131944 CAPLUS

DOCUMENT NUMBER: 140:399992

TITLE: Comparison of the AMPA Antagonist Action of New

2,3-Benzodiazepines in Vitro and Their Neuroprotective

Effects in Vivo

AUTHOR(S): Kapus, Gabor; Kertesz, Szabolcs; Gigler, Gabor; Simo, Annamaria; Vech, Miklos; Barkoczy, Jozsef; Harsing,

Laszlo G.; Szabo, Geza; Levay, Gyoergy

CORPORATE SOURCE: EGIS Pharmaceuticals Ltd., Budapest, H-1475, Hung.

SOURCE: Pharmaceutical Research (2004), 21(2), 317-323

CODEN: PHREEB; ISSN: 0724-8741

PUBLISHER: Kluwer Academic/Plenum Publishers

DOCUMENT TYPE: Journal

LANGUAGE . English

Purpose. AMPA receptor-mediated excitotoxicity is thought to be a critical process in diseases accompanied by neuronal cell loss following a hypoxic/anoxic state of the central nervous system. It has been suggested that blockade of AMPA receptors might result in significant protection of neurons against cellular damage. For testing the hypothesis, in vitro efficacy and in vivo neuroprotective action of new 2,3-benzodiazepine (2,3BDZ) AMPA antagonists have been compared. Methods. 2,3BDZs were tested on kainate-evoked whole-cell currents in cultured neurons as well as on population spikes (PS) in rat hippocampal slices. Data were correlated with those obtained from the spreading depression (SD) expts. in chicken retina. Compds. were also examined in the gerbil bilateral carotid occlusion model (BCO), where percentage decrease of ischemia-related hypermotility (HM), impaired spatial memory (SA), and hypoxia-induced hippocampal CA1 neuronal cell death (CA1) were evaluated. Results. Certain structural modifications of classical 2,3BDZs resulted in increased in vitro activity and improved in vivo efficacy. In particular, the halogen-substituted compds. EGIS-9879 and EGIS-9883 showed the highest neuroprotective efficacy (84% and 47% protection in CA1, 71% and 82% decrease in HM, resp.; 4 + 5 mg/kg i.p.) in BCO. PS and SD were correlated to the decrease of neuronal loss in the CA1 area. Lack of significant correlation was found between PS and CA1 (r = 0.437, p =0.079) or SD and CA1 (r = 0.380, p = 0.146). Conclusions. Several new 2,3BDZ AMPA receptor antagonists have been synthesized at EGIS Pharmaceuticals characterized by remarkable in vitro and corresponding in

vivo neuroprotective properties. 200419-08-5 200419-12-1 200419-14-3

200419-16-5 200419-22-3 200419-26-7 200419-30-3 200419-55-2 688804-56-0

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(comparison of AMPA antagonist and neuroprotective action of new 2.3-Benzodiazepines)

RN 200419-08-5 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3benzodiazepin-3-v1]- (CA INDEX NAME)

RN 200419-12-1 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-14-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

RN 200419-16-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminopheny1)-8-chloro-4,5-dihydro-4-methy1- (CA INDEX NAME)

RN 200419-22-3 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-26-7 CAPLUS

CN 1-Propanone, 1-[1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-30-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminopheny1)-8-bromo-4,5-dihydro-N,4-dimethy1- (CA INDEX NAME)

RN 200419-55-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-N-ethyl-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 688804-56-0 CAPLUS

CN

3H-2,3-Benzodiazepine-3-carboxamide,

10

32

1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-4-methyl- (CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

REFERENCE COUNT:

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:849603 CAPLUS

DOCUMENT NUMBER: 137:337928

TITLE: Benzodiazepines as inhibitors of cyclic nucleotide

phosphodiesterases

INVENTOR(S): Bourguignon, Jean-Jacques; Lagouge, Yan; Lugnier,

Claire

PATENT ASSIGNEE(S): Neuro3d, Fr.; Universite Louis Pasteur

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA'	KIND DATE					APPL	ICAT	DATE									
WO	2002	2002088096			A1		20021107			WO 2	002-		20020425				
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	zw							
	RW:						MZ,										
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
							CM,										
FR 2824065													20010426				
AU 2002257892					A1 20021111				AU 2002-257892						2	0020	425
PRIORITY APPLN. INFO.:										FR 2001-5648							
										WO 2	002-	FR14	28		W 2	0020	425
OTHER SOURCE(S): GI					MAR	PAT	137:	3379	28								

Ι

AB Novel 2,3-benzodiazepines I [R1 = alkyl, cycloalkyl, aryl, aralkyl, alkylaryl, heteroaryl, (un)substituted OH, SH NH2; R2R3 = bond; R2 = H, R3R4 = O; R4 = halogen, alkyl, alkenyl, alkynyl, Ph, (un)substituted OH, SH, NH2; R5, R6 = H, (un)substituted alkyl, Ph, phenylalkyl; CR5R6 = cyclic; R7, R8 = H, (un)substituted OH] were prepared for use as inhibitors of cyclic nucleotide phosphodiesterases in treatment of inflammation of the central nervous system or depression. Thus, 3,4-(MeO)2CGH3CH2CO2Me was treated with 2-naphthoyl chloride to give the 2-(2-naphthoyl) derivative which was cyclized with N2H4 to give I [R1 = 2-naphthoyl, R2, R5, R6 = H,

R3R4 = O, R7, R8 = OMe]. This compound had IC50 for inhibition of PDE4 of 1.5 μM_{\star}

II 474070-20-7P, 7,8-Dimethoxy-1-phenyl-4-(prop-1-ynyl)-5H-2,3benzodiazepine

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of benzodiazepines as inhibitors of cyclic nucleotide

RN 474070-20-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-phenyl-4-(1-propyn-1-yl)- (CA INDEX NAME)

IT 75114-10-2P, 7,8-Dimethoxy-4-methyl-1-phenyl-5H-2,3-benzodiazepine 474070-12-7P,

4-Butyl-7,8-dimethoxy-1-phenyl-5H-2,3-benzodiazepine 474070-21-8P, 7,8-Dimethoxy-1-phenyl-4-propyl-5H-2,3-

benzodiazepine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzodiazepines as inhibitors of cyclic nucleotide phosphodiesterases)

75114-10-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN

RN 474070-12-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 4-butyl-7,8-dimethoxy-1-phenyl- (CA INDEX NAME)

RN 474070-21-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-pheny1-4-propy1- (CA INDEX NAME)

IT 474070-19-4P, 7,8-Dimethoxy-4-(1-heptynyl)-1-phenyl-5H-2,3-benzodiazepine

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzodiazepines as inhibitors of cyclic nucleotide phosphodiesterases)

474070-19-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 4-(1-heptyn-1-y1)-7,8-dimethoxy-1-phenyl- (CA INDEX NAME)

4

OS.CITING REF COUNT:

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT:

RN

8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:487537 CAPLUS

DOCUMENT NUMBER: 137:63266

TITLE: Preparation of 2,3-benzodiazepines as AMPA

antagonists.

INVENTOR(S): Ling, Istvan; Barkoczy, Jozsef; Simig, Gyula; Greff, Zoltan; Ratkai, Zoltan; Szabo, Geza; Vegh, Miklos;

Gigler, Gabor; Szenasi, Gabor; Martonne Marko, Bernadett; Levay, Gyoergy; Harsing, Laszlo Gabor

PATENT ASSIGNEE(S): Egis Gyogyszergyar Rt., Hung.

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT :	NO.			KIN		DATE		APPLICATION NO.							DATE				
WO	2002	0500	44						WO 2001-HU151							20011219				
	W:	AE.	AG,	AL.	AM.	AT.	AU.	AZ.	BA,	BE	3.	BG.	BR.	BY,	BZ,	CA.	CH,	CN.		
															GB,					
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		BF	B.T	CE	CG	CT.	CM	GA	GN	GC	`	GW.	MT.	MR	NE	SN	TD	TG		
HU	2000	0049	94		A2		2002	1128	HU 2000-4994							20001221				
HU	2251	00			B1		2006	0628								20001221 20011219 20011219				
CA	2431	761			A1	0627	CA 2001-2431761							20011219						
CA	2431	761			C		2010	0525												
AU	2002	0173	56		A	AU 2002-17356							2	20011	219					
EP	1351	942			A1	EP 2001-271364							20011219							
EP	1351942				B1															
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GE	۲,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	٠,	TR								
JP	2004	5162	84		T		2004	0603	AT 2001-271364 PT 2001-271364 PT 2001-271364 ES 2001-271364 RO 2003-539 SK 2003-788 CZ 2003-1680 RG 2003-107922							20011219				
JP	4201	252			B2		2008	1224												
AT	2715	48			T		2004	0815		ΑT	20	01-	2713	64		2	20011	219		
PT	1351	942			E		2004	1130		PΤ	20	01-	2713	64		2	20011	219		
ES	2225	412			Т3		2005	0316		ES	20	01-	2713	64		2	20011	219		
RO	1212	68			B1		2007	0228		RO	20	03-	539			- 2	20011	219		
SK	2866	20			B6		2009	0205		SK	20	03-	788			2	20011	219		
CZ	3013	71			B6		2010	0203		CZ	20	03-	1680			2	20011	219		
BG	1079	32			A		2004	0227		BG	20	03-	1079	32		2	20030	620		
US	2004	0092	510		A1		2004	0513	BG 2003-107932 US 2003-450898							20031027				
US	7189 APP	711			B2		2007	0313												
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 137:63266

GI

AB Title compds. (I; X = H, Cl, MeO; Y = H, halo; Z = Me, Cl; R = alkyl, NRIR2; Rl, R2 = H, alkyl, alkoxy, cycloalkyl), were prepared Thus, 3-acetyl-4,5-dihydro-8-chloro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepine in methanol/CH2Cl2 was stirred with wet Raney nickel and hydrazine hydrate for 45 min to give 49% 3-acetyl-1-(4-amino-3-methylphenyl)-4,5-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2,3-dihydro-8-chloro-4-methyl-3H-2

3-acetyl-1-(4-amino-3-methylphenyl)-4,5-dihydro-8-chloro-4-methyl-3H-2,3-benzodiazepine. The latter prolonged the survival time of MgCl2-treated mice with PD50 = 4.6 mg/kg i.p.

IT 439143-67-6P 439143-68-7P 439143-69-8P 439143-70-1P 439143-71-2P 439143-72-3P 439143-73-4P 439143-74-5P 439143-75-6P 439143-76-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,3-benzodiazepines as AMPA antagonists)

RN 439143-67-6 CAPLUS

CN Ethanone, 1-[1-(4-amino-3-methylphenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 439143-68-7 CAPLUS

CN 1-Propanone, 1-[1-(4-amino-3-methylphenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 439143-69-8 CAPLUS

CN Ethanone, 1-[1-(4-amino-3-chloropheny1)-8-chloro-4,5-dihydro-4-methy1-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

439143-70-1 CAPLUS RN

Ethanone, 1-[1-(4-amino-3-methylphenyl)-7,8-dichloro-4,5-dihydro-4-methyl-CN 3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN

 $\begin{array}{lll} 439143-71-2 & \text{CAPLUS} \\ 1-\text{Propanone, } 1-[1-(4-\text{amino-}3-\text{methylphenyl})-7,8-\text{dichloro-}4,5-\text{dihydro-}4- \end{array}$ methy1-3H-2,3-benzodiazepin-3-y1]- (CA INDEX NAME)

RN 439143-72-3 CAPLUS

CN Ethanone, 1-[1-(4-amino-3-chloropheny1)-7,8-dichloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 439143-73-4 CAPLUS

CN Ethanone, 1-[1-(4-amino-3-methylphenyl)-4,5-dihydro-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 439143-74-5 CAPLUS

CN Ethanone, 1-[1-(4-amino-3-chlorophenyl)-4,5-dihydro-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 439143-75-6 CAPLUS

CN Ethanone, 1-[1-(4-amino-3-methylphenyl)-7-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 439143-76-7 CAPLUS

CN Ethanone, 1-[1-(4-amino-3-chlorophenyl)-7-bromo-4,5-dihydro-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

IT 439143-77-8 439143-78-9 439143-79-0 439143-80-3 439143-81-4 439143-82-5 439143-83-6 439143-84-7 439143-85-8 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of 2,3-benzodiazepines as AMPA antagonists)

RN 439143-77-8 CAPLUS

CN Ethanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 439143-78-9 CAPLUS

CN 1-Propanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 439143-79-0 CAPLUS

CN Ethanone, 1-[8-chloro-1-(3-chloro-4-nitrophenyl)-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

- RN 439143-80-3 CAPLUS
- CN Ethanone, 1-[7,8-dichloro-4,5-dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

- RN 439143-81-4 CAPLUS
- CN 1-Propanone, 1-[7,8-dichloro-4,5-dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

- RN 439143-82-5 CAPLUS
- CN Ethanone, 1-[7,8-dichloro-1-(3-chloro-4-nitrophenyl)-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

- RN 439143-83-6 CAPLUS
- CN Ethanone, 1-[4,5-dihydro-8-methoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

- RN 439143-84-7 CAPLUS
- CN Ethanone, 1-[1-(3-chloro-4-nitropheny1)-4,5-dihydro-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

- RN 439143-85-8 CAPLUS
- CN Ethanone, 1-[7-chloro-4,5-dihydro-4-methyl-1-(3-methyl-4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

L22 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:935585 CAPLUS

DOCUMENT NUMBER: 136:69827

TITLE: Preparation of 7- or 8-mono-substituted

5H-2,3-benzodiazepines as antagonists of excitatory

amino acid receptors
INVENTOR(S): Pei, Xue-Feng; Li, B

INVENTOR(S): Pei, Xue-Feng; Li, Baoqing; Maccecchini, Maria-Luisa

PATENT ASSIGNEE(S): Annovis, Inc., USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PR.

PAT	ENT :	.00			KIN)	DATE			APP	LICAT	ION	NO.		D.	ATE		
						-									_			
WO	WO 2001098280				A2 20011227					WO	2001-	US19		20010615				
WO	WO 2001098280				A3	A3 20020530												
	W:	CA,	JP															
	RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR	, GB,	GR,	IE,	IT,	LU,	MC,	NL,	
		PT,	SE,	TR														
US	2002	0025	958		A1		2002	0228		US	2001-	8828	43		2	0010	615	
US	6887	867			B2		2005	0503										
EP	1296	960			A2		2003	0402		EP	2001-	9483	67		2	0010	615	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR							
IORITY	APP	LN.	INFO	. :						US	2000-	2122	38P	I	2	0000	616	
										WO	2001-	US19	136	1	v 2	0010	615	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 136:69827 GI

AB Title compds. [I; dotted bond = single, double; X = N, NR; R = COCH3, CONHCH3, CONHCH2CH3, CONHCH2CH3, CONHCH2CH3, CONHCH2CH3, R2 = H, OCH3, NH2, SCH3; R3 = OCH3, H, NH2, SCH3; R3 = OCH3, H, NH2, SCH3] and pharmaceutically acceptable salts are prepared as active non-NMDA inotropic excitatory amino acid (EAA) receptor antagonists and are useful for treating disorders associated with excessive activation of the non-NMDA subtype of the inotropic EAA receptor. Title compds. I further are useful as testing agents to identify and characterize other compds. for the treatment of these disorders. The

compds. are useful therapeutically as sedatives or for the treatment of neurosychopharmacol. disorders such as stroke, ischemia and epilepsy. The compns. may be provided in combination with a suitable carrier for oral or parenteral administration. The compds. may be administered orally or parenterally for the treatment of a variety of disorders associated with non-NMDA EAA receptor function.

T 383857-60-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of or 7- or 8-mono-substituted 5H-2,3-benzodiazepines as antagonists of excitatory amino acid receptors)

RN 383857-60-1 CAPLUS

CN Ethanone, 1-[4,5-dihydro-7-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

383857-87-2P 383857-88-3P 383857-89- 383857-90-7P 383857-91-8P 383857-92- 383857-93-0P 383857-94-1P 383858-15- 383858-16-0P 383858-17-1P 383858-18-	-9P
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383858-23-9P 383858-25-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of or 7- or 8-mono-substituted 5H-2,3-benzodiazepines as antagonists of excitatory amino acid receptors)

RN 194671-88-0 CAPLUS CN Ethanone, 1-11-(4-a)

Ethanone, 1-[1-(4-aminopheny1)-4,5-dihydro-8-methoxy-4-methy1-3H-2,3-benzodiazepin-3-y1]- (CA INDEX NAME)

RN 194671-92-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-8-methoxy-N,4-dimethyl- (CA INDEX NAME)

RN 383857-61-2 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-4,5-dihydro-7-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 383857-76-9 CAPLUS

CN Ethanone, 1-[7-amino-1-(4-aminophenyl)-4,5-dihydro-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 383857-79-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-7-methoxy-N,4-dimethyl- (CA INDEX NAME)

RN 383857-80-5 CAPLUS

CN

3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-N-ethyl-4,5-dihydro-7-methoxy-4-methyl- (CA INDEX NAME)

RN 383857-81-6 CAPLUS

3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminopheny1)-4,5-dihydro-7-methoxy-4-methyl-N-propyl- (CA INDEX NAME)

CN

RN 383857-82-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-N-butyl-4,5-dihydro-7-methoxy-4-methyl- (CA INDEX NAME)

RN 383857-83-8 CAPLUS

CN Ethanone, 1-[8-amino-1-(4-aminophenyl)-4,5-dihydro-7-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 383857-84-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-amino-1-(4-aminophenyl)-4,5-dihydro-7-methoxy-N,4-dimethyl- (CA INDEX NAME)

RN 383857-85-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-amino-1-(4-aminophenyl)-N-ethyl-4,5-dihydro-7-methoxy-4-methyl- (CA INDEX NAME)

RN 383857-86-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-amino-1-(4-aminophenyl)-4,5-dihydro-7-methoxy-4-methyl-N-propyl- (CA INDEX NAME)

RN 383857-87-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

8-amino-1-(4-aminophenyl)-N-butyl-4,5-dihydro-7-methoxy-4-methyl- (CA INDEX NAME)

RN 383857-88-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminophenyl)-N-ethyl-4,5-dihydro-8-methoxy-4-methyl- (CA INDEX NAME)

RN 383857-89-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminophenyl)-4,5-dihydro-8-methoxy-4-methyl-N-propyl- (CA INDEX NAME)

RN 383857-90-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-N-butyl-4,5-dihydro-8-methoxy-4-methyl- (CA INDEX NAME)

RN 383857-91-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 7-amino-1-(4-aminophenyl)-4,5-dihydro-8-methoxy-N,4-dimethyl- (CA INDEX NAME)

RN 383857-92-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 7-amino-1-(4-aminopheny1)-N-ethy1-4,5-dihydro-8-methoxy-4-methy1- (CA INDEX NAME)

RN 383857-93-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,
7-amino-1-(4-aminopheny1)-4,5-dihydro-8-methoxy-4-methy1-N-propy1- (CA INDEX NAME)

RN 383857-94-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,
7-amino-1-(4-aminophenyl)-N-butyl-4,5-dihydro-8-methoxy-4-methyl- (CA INDEX NAME)

RN 383858-15-9 CAPLUS

CN Benzenamine, 4-(7-methoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

RN 383858-16-0 CAPLUS

CN 5H-2,3-Benzodiazepin-8-amine, 1-(4-aminophenyl)-7-methoxy-4-methyl- (CA INDEX NAME)

RN 383858-17-1 CAPLUS

CN Benzenamine, 4-(8-methoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

- RN 383858-18-2 CAPLUS
- CN 5H-2,3-Benzodiazepin-7-amine, 1-(4-aminophenyl)-8-methoxy-4-methyl- (CA INDEX NAME)

- RN 383858-23-9 CAPLUS
- CN Ethanone, 1-[(4R)-1-(4-aminophenyl)-4,5-dihydro-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

- RN 383858-25-1 CAPLUS
- CN Ethanone, 1-[(4R)-1-(4-aminophenyl)-4,5-dihydro-7-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

IT 383857-70-3P 383857-74-7P 383857-75-8P 383857-78-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of or 7- or 8-mono-substituted 5H-2,3-benzodiazepines as antagonists of excitatory amino acid receptors)

RN 383857-70-3 CAPLUS

CN Ethanone, 1-[4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-vl]- (CA INDEX NAME)

RN 383857-74-7 CAPLUS

CN Acetamide, N-[3-acetyl-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-7-yl]- (CA INDEX NAME)

RN 383857-75-8 CAPLUS

CN Ethanone, 1-[7-amino-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 383857-78-1 CAPLUS

CN 5H-2,3-Benzodiazepin-7-amine, 8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

OS.CITING REF COUNT:

- THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
- REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

3

10/567.598

L22 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:564507 CAPLUS

DOCUMENT NUMBER: 133:335218

TITLE: New non competitive AMPA antagonists

AUTHOR(S): Abraham, G.; Solyom, S.; Csuzdi, E.; Berzsenyi, P.; Ling, I.; Tarnawa, I.; Hamori, T.; Pallagi, I.; Horvath, K.; Andrasi, F.; Kapus, G.; Harsing, L. G.;

Kiraly, I.; Patthy, M.; Horvath, G.

CORPORATE SOURCE: Institute for Drug Research, Budapest, H-1045, Hung.

SOURCE: Bioorganic & Medicinal Chemistry (2000), 8(8),

2127-2143

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal

LANGUAGE: English

New halogen atom substituted 2,3-benzodiazepine derivs. condensed with an AB azole ring on the seven membered part of the ring system were synthesized. It was found that chloro-, dichloro- and bromo-substitutions in the benzene ring and addnl. imidazole ring condensation on the diazepine ring can successfully substitute the methylenedioxy group in the well known mols. GYKI 52466 and GYKI 53773 and the 3-acetyl-4-Me structural feature in GYKI 53773, resp., preserving the highly active AMPA antagonist characteristic of the original mols. From the most active compds. I (GYKI 47261) was chosen for detailed investigations. I revealed an excellent, broad spectrum anticonvulsant activity against seizures evoked by electroshock and different chemoconvulsive agents indicating a possible antiepileptic efficacy. I is highly active in a transient model of focal ischemia predictive of a therapeutic value in human stroke. I also reversed the dopamine depleting effect of MPTP and antagonized the oxotremorine induced tremor in mice indicating a potential antiparkinson activity.

II 200419-71-2P 220445-45-4P 220445-47-6P
220445-48-7P 220445-49-6P 220445-50-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of imidazobenzodiazepines as non-competitive AMPA antagonists)

CN 5H-2,3-Benzodiazepine, 8-chloro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 220445-45-4 CAPLUS

CN Acetamide, N-[[8-chloro-1-(4-nitrophenyl)-5H-2,3-benzodiazepin-4-yl]methyl]- (CA INDEX NAME)

RN 220445-47-6 CAPLUS

CN 5H-2,3-Benzodiazepine-4-carboxaldehyde, 8-chloro-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 220445-48-7 CAPLUS

CN 5H-2,3-Benzodiazepine-4-methanol, 8-chloro-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 220445-49-8 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[[8-chloro-1-(4-nitrophenyl)-5H-2,3-benzodiazepin-4-yl]methyl]- (CA INDEX NAME)

RN 220445-50-1 CAPLUS

CN 5H-2,3-Benzodiazepine-4-methanamine, 8-chloro-1-(4-nitrophenyl)- (CA INDEX NAME)

OS.CITING REF COUNT:

41 THERE ARE 41 CAPLUS RECORDS THAT CITE THIS RECORD (42 CITINGS)

L22 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:240950 CAPLUS

DOCUMENT NUMBER: 132:270096

TITLE: Pharmaceutical compositions containing an opiate

analgesic and a synergizing substance

INVENTOR(S): Szekely, Jozsef; Andrasi, Ferenc; Mate, Gyorgyne; Horvath, Katalin; Horvath, Edit; Haskane, Salamon

> Cecilia; Aranvi, Peter; Gigler, Gabor; Fekete, Pal; Fekete, Marton

PATENT ASSIGNEE(S): Egis Gyogyszergyar Rt., Hung.; Haskane Salamon,

Cecilia; et al.

PCT Int. Appl., 32 pp. SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE

LANGUAGE:	English					
FAMILY ACC. NUM. COUNT: PATENT INFORMATION:	1					
PATENT INFORMATION:						
	KIND DATE APPLICATION NO. DATE					
WO 2000020005	A1 20000413 WO 1998-HU90 19981001					
	AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,					
DK, EE, ES,	FI, GB, GE, GH, GM, HR, ID, IL, IS, JP, KE, KG, KP,					
	LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,					
	RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,					
	VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,					
	GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,					
	GW, ML, MR, NE, SN, TD, TG					
	A1 20000426 AU 1998-95538 19981001					
PRIORITY APPLN. INFO.:						
AB The invention relates to a synergistic analgesic pharmaceutical composition						
comprising an opiate analgesic agent (component A) and a substance						
synergizing the analgesic effect of the opiate (component B) in admixt.						
with suitable inert solid or liquid pharmaceutical carriers and/or diluents.						
Morphine-HCl (I) (2 parts) and 5 parts by weight tofisopam (II) are dispersed						
in 53 parts Witepsol S 58 and melted at 50°. The still liquid						
suspension is filled into conical forms, solidified by cooling to						
25° and the suppositories are removed from the mold. Thus						

suppositories having an average weight of 6 g and containing 20 mg I and 50 mg

II are obtained.

IT 142790-94-1 177034-98-9

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing an opiate analgesic and synergizing substance)

142790-94-1 CAPLUS RN

CN 5H-2,3-Benzodiazepine-4-methanol, 1-(3-chlorophenyl)-7,8-dimethoxy- (CA INDEX NAME)

RN 177034-98-9 CAPLUS

CN Acetamide, N-[4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)phenyl](CA INDEX NAME)

OS.CITING REF COUNT:

3

- 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
- REFERENCE COUNT:
- THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:595063 CAPLUS

DOCUMENT NUMBER: 132:119344

TITLE: [3H]-Girisopam, a novel selective benzodiazepine for

the 2,3-benzodiazepine binding site

AUTHOR(S): Horvath, Edit J.; Salamon, Cecilia; Bakonyi, Anna;

Fekete, Marton I. K.; Palkovits, Miklos

CORPORATE SOURCE: Institute for Drug Research, Budapest, H-1325, Hung.

SOURCE: Brain Research Protocols (1999), 4(2), 230-235

CODEN: BRPRFP; ISSN: 1385-299X

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

LANGUAGE: Begins AB Several members of the 2,3-benzodiazepine family, such as tofisopam (Grandaxin) nerisopam (GYKT-51 322) or girisopam (GYKT-51 189) proved anxiolytic in man and various animal models. Moreover, girisopam could also be characterized as an atypical neuroleptic agent. In spite of the structural similarity, their pharmacol. profiles differ significantly from that of the "classical" 1,4-benzodiazepines. Importantly, according to the data obtained so far these drugs do not have an addiction potential. The novel 2,3-benzodiazepine antagonist girisopam binds with high affinity (Kd = 10.3 ± 1.2 nM) and limited capacity (Bmax = 6.94 ± 1.8 pmol/mg protein) to a single class of recognition sites in rat striatum. This protocol describes the use of [381-girisopam as a specific

radioligand for the 2,3-benzodiazepines receptor. 256459-79-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

([3H]-girisopam: selective radioligand for benzodiazepine receptors)

RN 256459-79-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-7,8-dimethoxy-4-methyl-, labeled with tritium (9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:113684 CAPLUS

DOCUMENT NUMBER: 130:168401

TITLE: New 2,3-benzodiazepine derivatives

INVENTOR(S): Abraham, Gizella; Csuzdi, Emese; Solyom, Sandor; Berzsenyi, Pal; Tarnawa, Istvan; Andrasi, Ferenc; Ling, Istvan; Hamori, Tamas; Horvath, Katalin;

Moravcsik, Imre; Pallagi, Istvan; Simav, Antal PATENT ASSIGNEE(S): Gyogyszerkutato Intezet Kft., Hung.

SOURCE: PCT Int. Appl., 38 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PATENT NO.			KIND DATE			APPLICATION NO.					DATE						
										1 WO 1998-HU71								
		W:												, CH,				
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	H	R, HU	J, ID	, IL,	IS,	JP,	KE,	KG,
			KΡ,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU	J, LN	, MD	, MG,	MK,	MN,	MW,	MX,
			NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SC	, SI	, SK	, SL,	TJ,	TM,	TR,	TT,
			UA,	UG,	US,	UZ,	VN,	YU,	ZW									
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZV	7, AT	, BE	CH,	CY,	DE,	DK,	ES,
														BF,				
			CM.	GA.	GN.	GW.	MT.	MR.	NE.	SN.	TI). TO	:					
	HU	9701	325			A1		2000	0828		HU	199	-132	5		1	9970	731
	CA	9701 2296	586			A1		1999	0211		CA	1998	-229	6586		1	9980	727
	CA	2296.	586			C		2007	0403									
	ΑU	9885	540			A		1999	0222		AU	1998	-855	40		1	9980	727
	AU	7411	62			B2		2001	1122									
	EP	1001	956			A1		2000	0524		ΕP	1998	-936	578		1	9980	727
		1001																
		R:	AT.	BE.	CH.	DE.	DK.	ES.	FR.	GB.	GE	R. II	LI.	LU,	NL.	SE.	MC.	PT.
			IE.	FI														
	JP	2001 2397 1001	5121	24		Т		2001	0821		JP	2000	-505	166		1	9980	727
	AΤ	2397	29			T		2003	0515		AΤ	1998	-936	578		1	9980	727
	PT	1001	956			E		2003	0930		PT	1998	-936	578		1	9980	727
	ES	2202	879			T3		2004	0401		ES	1998	-936	578		1	9980	727
	US	6482	819			B1		2002	1119		US	2000	-463	440		2	0000	410
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 130:168401

GI

AB The invention relates to new tricyclic 2,3-benzodiazepine derive. I (R1, R2 = H, halogen, alkyl, alkoxy, NO2, CF3, (un) substituted NH2;R3 = H, C1; R4 = C1, Br; XR = (un) substituted NCH:CH, NN:CH, CHN:CH, CHCH:CH]. The compds. are suitable for treating conditions associated with muscle spasms, spilepsy as well as acute and chronic forms of neurodegenerative diseases. Thus, imidazobenzodiazepine II was prepared by treating 8-chloro-1-(4-nitrophenyl)-3H-4,5-chinydro-2,3-benzodiazepine-4-thione with 2-(1-aminoethyl)-1,3-dioxolane and reduction of the nitro group. II had an ED50 of 54 mg/kg orally in mice in the pentetrazole test and an ED50 of 16

mg/kg i.p. in the rotarod test in mice. T 1T 200419-71-2P 220445-45-4F 220445-47-6P 220445-48-7P 220445-49-8P 220445-50-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of azolobenzodiazepines as anticonvulsants and muscle relaxants)

RN 200419-71-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 8-chloro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 220445-45-4 CAPLUS

CN Acetamide, N-[[8-chloro-1-(4-nitrophenyl)-5H-2,3-benzodiazepin-4yl]methyl]- (CA INDEX NAME)

RN 220445-47-6 CAPLUS

CN 5H-2,3-Benzodiazepine-4-carboxaldehyde, 8-chloro-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 220445-48-7 CAPLUS

CN 5H-2,3-Benzodiazepine-4-methanol, 8-chloro-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 220445-49-8 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[[8-chloro-1-(4-nitropheny1)-5H-2,3-benzodiazepin-4-y1]methy1]- (CA INDEX NAME)

RN 220445-50-1 CAPLUS CN 5H-2,3-Benzodiazepine-4-methanamine, 8-chloro-1-(4-nitrophenyl)- (CA INDEX NAME)

- OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
- REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/567.598

L22 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN 1998:348614 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

129:90362

ORIGINAL REFERENCE NO.: 129:18471a, 18474a

Pharmacokinetic study of nerisopam, a novel anxiolytic TITLE: drug-proband, and its N-acetyl metabolite in rats AUTHOR(S): Arv, Kornelia; Rona, Kalman; Renczes, Gabor; Gachalvi,

Bela; Grezal, Gyula; Klebovich, Imre; Riesz, Tamas CORPORATE SOURCE: Department of First Medicine, Division of Clinical

Pharmacology, Haynal Imre University of Health

Sciences, Budapest, H-1389, Hung.

SOURCE: Pharmacy and Pharmacology Communications (1998), 4(4),

225-228

CODEN: PPCOFN; ISSN: 1460-8081

PUBLISHER: Royal Pharmaceutical Society of Great Britain

DOCUMENT TYPE: Journal

LANGUAGE: English The pharmacokinetics of nerisopam and its N-acetyl metabolite were examined

in parallel by means of a validated solid phase extraction high-performance liquid chromatog. method. Nerisopam was absorbed rapidly and could be measured in plasma for about 8 h. It could be described by a two-compartment open model in rats. The peak plasma concentration of the N-acetyl metabolite was reached rapidly a little later than the parent compound and could be measured for about 12 h. The pharmacokinetics of N-acetyl metabolite could be described by a one-compartment open model. The fast appearance of the metabolite and the higher Cmax and $AUC0-\infty$ values than nerisopam suggest an intensive first-pass metabolism The increase in the AUC-dose ratio with increase in dose suggests that the

elimination of the metabolite is concentration-dependent.

177034-98-9

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pharmacokinetics of nerisopam and its N-acetyl metabolite in rats)

RN 177034-98-9 CAPLUS

CN Acetamide, N-[4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)phenyl]-(CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L22 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:263102 CAPLUS DOCUMENT NUMBER: 129:12241

DOCUMENT NUMBER: 129:12241

ORIGINAL REFERENCE NO.: 129:2503a,2506a

TITLE: Determination of girisopam (2,3-benzodiazepine

compound) and its four metabolites in human and rat

plasma by gradient RP-HPLC method

AUTHOR(S): Urmos, Ivan; Klebovich, Imre; Nemes, Katalin Balogh CORPORATE SOURCE: Department of Pharmacokinetics, EGIS Pharmaceuticals

Ltd., Budapest, H-1475, Hung.

SOURCE: Journal of Liquid Chromatography & Related

Technologies (1998), 21(6), 803-818 CODEN: JLCTFC; ISSN: 1082-6076

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

DANOUNCE:

AB A gradient RP-HPLC bioanal. method has been developed for the human pharmacokinetic studies of girisopam, the new 2,3-benzodiazepine compound with anxiolytic effect that has no myorelaxant and anticonvulsive side effects. The compound is an analog of tofizopam (Grandaxin, EGIS Pharmaceuticals Ltd., Budapest, Hungary). The method was found to be appropriate for the purposes of human pharmacokinetic studies performed at 25, 50, 100, 200, 325, and 525 mg dose levels. The method allowed the simultaneous determination of girisopam (G) and its four metabolites (4'-hydroxy-G, "-demethyl-G, 4-hydroxymethyl-G and 4-demethyl-4-oxo-G) identified in previous studies in human plasma. The solutes were separated on Hypersil BDS C18 column and quantified by UV detection at 238 mm. A solid phase extraction (SPE) method using reversed-phase cartridges was developed for sample processing, whereby qirisopam and the much more polar metabolites,

limit

as well as the internal standard could be extracted in a single step. The t of quantitation (LLOQ) was: 1 ng/mL in the case of Girisopam (G), 4-hydroxymethyl-G, 4-demethyl-4-oxo-G and 4'-hydroxy-G. In the case of 7-demethyl-LOQ amounted to 2 ng/mL. The calibration curves showed good linearity; r = 0.9595, 0.9928, 0.9954, and 0.9974 in the concentration

range

of 1-500 ng/mL and r = 0.9959 in the range of 2-500 ng/mL resp. The validation results obtained for all the five solutes indicated that the present method complied with internationally accepted criteria and ensured quant. detns. of appropriate accuracy and reproducibility. After small modification and validation, the developed method was applied for

determination of

girisopam and its metabolites in rat plasma in a toxicol. study (in vivo rat liver micronucleus test) at 600 and 1200 mg/kg dose levels. The LLOQ was 10 ng/mL for girisopam and 50 ng/mL for metabolites in rat plasma. The validation parameters for determination of solutes in rat plasma were internationally acceptable. The linearity was good for all components (r \geq 0.992) in the wide calibration range of 10-18000 ng/mL and 50-6000 ng/mL in the case of girisopam and its metabolites resp. The absorption of girisopam was verified by the measuring of girisopam and its metabolite (7-demethyl-G) in the plasma samples of toxicol. study (micronucleus test).

T 142790-94-1 142839-39-2 142839-40-5 RL: ANT (Analyte); ANST (Analytical study)

(determination of girisopam (2,3-benzodiazepine compound) and its four metabolites in human and rat plasma by gradient RP-HPLC method)

RN 142790-94-1 CAPLUS

CN 5H-2,3-Benzodiazepine-4-methanol, 1-(3-chlorophenyl)-7,8-dimethoxy- (CA INDEX NAME)

RN 142839-39-2 CAPLUS

CN 5H-2,3-Benzodiazepin-7-ol, 1-(3-chlorophenyl)-8-methoxy-4-methyl- (CA INDEX NAME)

RN 142839-40-5 CAPLUS

CN Phenol, 2-chloro-4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-(CA INDEX NAME)

OS.CITING REF COUNT:

1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT:

8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

10/567.598

L22 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:61237 CAPLUS

DOCUMENT NUMBER: 128:172196

ORIGINAL REFERENCE NO.: 128:33853a,33856a

TITLE: Derivatization reactions for the spectrofluorimetric

determination of

1-(amino-substituted-phenyl)-5H-2,3-benzodiazepines
AUTHOR(S): Kasa, Imre

CORPORATE SOURCE: Department of Physical Chemistry, Technical University

of Budapest, Budapest, H-1521, Hung.

SOURCE: ACH - Models in Chemistry (1997), 134(2-3), 233-240

CODEN: ACMCEI; ISSN: 1217-8969

PUBLISHER: Akademiai Kiado
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fluorescent derivatization reactions of five

Fluorescent derivatization reactions of five 1-(amino-substituted-phenyl)-5H-2,3-benzodiazepines were investigated. In the first ("A") reaction the 2,3-benzodiazepines can transform into 2-naphthol derive. having intensive fluorescence in highly acidic medium by hydrolysis and subsequent aldol condensation in basic medium (with the exception of 1-(2-aminophenyl)-4-methyl-7,8-dimethoxy-5H-2,3-benzodiazepine). In the second ("B") reaction the 2-naphthol derivs. are formed directly in dimethylsulfoxide (DMSO) solution in the presence of alkali-hydroxide by heating. With the use of these reactions sensitive simple and rapid spectrofluorimetric anal. methods were developed for the quant. determination of five 2,3-benzodiazepine derivs.

IT 102771-20-0 203068-01-3

RL: ANT (Analyte); ANST (Analytical study) (determination of benzodiazepines by spectrofluorimetry)

RN 102771-20-0 CAPLUS

CN Benzenamine, 2-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

RN 203068-01-3 CAPLUS

CN Benzenamine, 3-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:38908 CAPLUS

DOCUMENT NUMBER: 128:61530

ORIGINAL REFERENCE NO.: 128:12055a,12058a

TITLE: Preparation of 2,3-benzodiazepine derivatives as noncompetitive AMPA antagonists.

INVENTOR(S): Ling, İstvan; Abraham, Gizella; Berzsenyi, Pal;
Tarnawa, Istvan; Solyom, Sandor; Andrasi, Ferenc;

Hamori, Tamas; Csuzdi, Emese; Horvath, Katalin; Gal, Melinda; Moravcsik, Imre; Szoelloesy, Marta

Melinda; Moravcsik, Imre; Szoelloesy, Marta PATENT ASSIGNEE(S): Eqis Gyoqyszergyar Rt, Hung.

SOURCE: Egis Gyogyszergyar Rt, Hung. Brit. UK Pat. Appl., 53 pp.

CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
GB 2311779	Α	19971008	GB 1997-6945		19970404
GB 2311779	В	19990714			
AU 9716362	A	19971009	AU 1997-16362		19970318
ZA 9702746	A	19981009	ZA 1997-2746		19970401
CZ 291520	В6	20030312	CZ 1997-978		19970401
SK 282258	B6	20011203	SK 1997-423		19970402
FR 2747121	A1	19971010	FR 1997-4063		19970403
FR 2747121	B1	19980821			
BE 1010962	A4	19990302	BE 1997-308		19970403
NZ 314517	A	20000327	NZ 1997-314517		19970403
HR 9700186	B1	20020630	HR 1997-186		19970403
AU 9717734	A	19971009	AU 1997-17734		19970404
AU 720745	B2	20000608			
EP 802195	A2	19971022	EP 1997-105591		19970404
EP 802195	A3	19971203			
EP 802195	B1	20031119			
R: AT, CH, DE,	LI, NL	, SE, SI, LI	r, LV, FI		
JP 10036356	A	19980210	JP 1997-86800		19970404
JP 3131767	B2	20010205			
ES 2127699	A1	19990416	ES 1997-703		19970404
ES 2127699	B1	20000116			
AT 254608	T	20031215	AT 1997-105591		19970404
PRIORITY APPLN. INFO.:			HU 1996-871	A	
			US 1997-832777	A	19970404
OTHER SOURCE(S):	MARPAT	128:61530			

OTHER SOURCE(S): MARPAT 128:61530

GI

AB Title compds. [I; R1, R2 = H, halo, alkyl, alkoxy, NO2, CF3, NR8R9; R8, R9 = H, alkyl, CGRO[9, R10, R13 = H, (substituted) alkyl aryl, alkoxy, cycloalkyl, alkenyl, cycloalkoxy, NR11R12; R11, R12 = H, alkyl, cycloalkyl, aryl; R3 = alkyl, cycloalkyl, CGR13; R4, R5 = H, alkyl; R6, R7 = H, Cl, Br, with the proviso that if 1 of R6, R7 = H, then the other # H], were prepared Thus, 1-(4-aminophenyl)-7, B-dichloro-4-methyl-3-methylcarbamoyl-4, 5-dihydro-3H-2, 3-benzodiazepine (preparation given) showed IC50 = 1.2 µM for antagonizing kainic acid induced retinal spreading depression.

ΙT	200419-03-0P	200419-04-1P	200419-05-2P
	200419-06-3P	200419-07-4P	200419-08-5P
	200419-09-6P	200419-10-9P	200419-11-0P
	200419-12-1P	200419-13-2P	200419-14-3P
	200419-15-4P	200419-16-5P	200419-17-6P
	200419-18-7P	200419-19-8P	200419-20-1P
	200419-21-2P	200419-22-3P	200419-23-4P
	200419-24-5P	200419-25-6P	200419-26-7P
	200419-27-8P	200419-28-9P	200419-29-0P
	200419-30-3P	200419-32-5P	200419-34-7P
	200419-36-9P	200419-37-0P	200419-38-1P
	200419-40-5P	200419-42-7P	200419-44-9P
	200419-46-1P	200419-48-3P	200419-50-7P
	200419-52-9P	200419-54-1P	200419-55-2P
	200419-56-3P	200419-57-4P	200419-58-5P
	200419-59-6P	200419-60-9P	200419-61-0P
	200419-62-1P	200419-63-2P	

Ι

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,3-benzodiazepine derivs. as noncompetitive AMPA antagonists)

RN 200419-03-0 CAPLUS

CN Ethanone, 1-[7-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-04-1 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-7-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-05-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 7-chloro-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-06-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminopheny1)-7-chloro-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

RN 200419-07-4 CAPLUS

CN Ethanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-08-5 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-09-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-10-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

RN 200419-11-0 CAPLUS

CN Ethanone, 1-[7,8-dichloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-12-1 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-13-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 7,8-dichloro-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-14-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-N,4-dimethyl- (CA INDEX NAME)

RN 200419-15-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-16-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 200419-17-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, ethyl ester (CA INDEX NAME)

RN 200419-18-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-, ethyl ester (CA INDEX

NAME)

RN 200419-19-8 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, N-butyl-8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-20-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-N-butyl-8-chloro-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 200419-21-2 CAPLUS

CN Ethanone, 1-[8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-

benzodiazepin-3-y1]- (CA INDEX NAME)

RN 200419-22-3 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-23-4 CAPLUS

CN Ethanone, 1-[8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-2,2,2-trifluoro- (CA INDEX NAME)

RN 200419-24-5 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-

benzodiazepin-3-y1]-2,2,2-trifluoro- (CA INDEX NAME)

RN 200419-25-6 CAPLUS

CN 1-Propanone, 1-[8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-26-7 CAPLUS

CN 1-Propanone, 1-[1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-27-8 CAPLUS

CN Methanone, [8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-

benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

RN 200419-28-9 CAPLUS

CN Methanone, [1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

RN 200419-29-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-bromo-4,5-dihydro-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-30-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

1-(4-aminopheny1)-8-bromo-4,5-dihydro-N,4-dimethy1- (CA INDEX NAME)

RN 200419-32-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, ethyl ester (CA INDEX NAME)

RN 200419-34-7 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl-, ethyl ester (CA INDEX NAME)

CN

RN 200419-36-9 CAPLUS

3H-2,3-Benzodiazepine-3-carboxamide, 8-bromo-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-37-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-bromo-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 200419-38-1 CAPLUS

CN Ethanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-2,2,2-trifluoro- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & & \\ & & \\ F_3C-C & N & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 200419-40-5 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3benzodiazepin-3-y1]-2,2,2-trifluoro- (CA INDEX NAME)

200419-42-7 CAPLUS 1-Propanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-CN benzodiazepin-3-yl]- (CA INDEX NAME)

200419-44-9 CAPLUS RN

1-Propanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-CN benzodiazepin-3-y1]- (CA INDEX NAME)

RN 200419-46-1 CAPLUS

CN Methanone, [8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

RN 200419-48-3 CAPLUS

CN Methanone, [1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

RN 200419-50-7 CAPLUS

CN Ethanone, 1-[8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]-, (+)- (CA INDEX NAME)

Rotation (+).

RN 200419-52-9 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-3H-2,3-benzodiazepin-3-yl]-, (-)- (CA INDEX NAME)

Rotation (-).

RN 200419-54-1 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-N-ethyl-4,5-dihydro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-55-2 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-N-ethyl-4,5-dihydro-4-methyl- (CA INDEX NAME)

RN 200419-56-3 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,

8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-N-propyl- (CA INDEX NAME)

RN 200419-57-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-N-propyl- (CA INDEX NAME)

RN 200419-58-5 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 8-chloro-4,5-dihydro-4-methyl-N-(1-methylethyl)-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-59-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-8-chloro-4,5-dihydro-4-methyl-N-(1-methylethyl)- (CA INDEX NAME)

RN 200419-60-9 CAPLUS

CN

3H-2,3-Benzodiazepine-3-carboxylic acid,
7,8-dichloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-, ethyl ester (CA INDEX NAME)

RN 200419-61-0 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-4-methyl-, ethyl ester (CA INDEX NAME)

RN 200419-62-1 CAPLUS

CN 1-Butanone, 1-[7,8-dichloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 200419-63-2 CAPLUS

CN 1-Butanone, 1-[1-(4-aminophenyl)-7,8-dichloro-4,5-dihydro-4-methyl-3H-2,3benzodiazepin-3-yl]- (CA INDEX NAME)

IT 200419-67-6P 200419-71-2P 200419-73-4P 200419-84-7P 200419-87-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 2,3-benzodiazepine derivs. as noncompetitive AMPA antagonists)

RN 200419-67-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 7-chloro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-71-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 8-chloro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-73-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dichloro-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-84-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 8-bromo-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 200419-87-0 CAPLUS
CN 3H-2,3-Benzodiazepine, 8-chloro-4,5-dihydro-4-methyl-1-(4-nitrophenyl)-,
(+)- (CA INDEX NAME)

Rotation (+).

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L22 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:533626 CAPLUS DOCUMENT NUMBER: 127:205596

ORIGINAL REFERENCE NO.: 127:39971a,39974a

TITLE: 2,3-benzodiazepine derivatives and their use as AMPA-receptor inhibitors

INVENTOR(S): Ling, Istvan; Abraham, Gizella; Solvom, Sandor; Hamori, Tamas; Tarnawa, Istvan; Berzsenyi, Pal;

Andrasi, Ferenc; Csuzdi, Emese; Szollosy, Marta; Simay, Antal; Pallagi, Istvan; Horvath, Katalin Schering A .- G., Germany

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 30 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE . German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.				KIND DATE			APPLICATION NO.				DATE							
						WO 1997-DE225													
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											WO	1997-	DE22	5		W 1	9970	129	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 127:205596; MARPAT 127:205596

GI

AB Title compds. I [R1 = (un)substituted Ph; R2 = H, halogen; R3 = H, acyl, alkyl, cycloalkyl; R4 = (un)substituted alkyl; R5, R7 = H; R3R5, R5R7 = bond; R4R5 = O; R6 = alkyl] were prepared Owing to their non-competitive inhibiting of the AMPA receptors, these compds. can be used as medicaments for treating diseases of the central nervous system. Thus, I [R1 = 4-H2NC6H4, R2, R3, R7 = H, R4R5 = O, R6 = Me]was prepared from 3,4-Br(MeO)C6H3CH2CO2Me by reduction to the alc., reaction with 4-O2NC6H4CHO, Jones oxidation of the resulting isochroman, cyclization with N2H4, and

reduction of the nitro group.

1230970-99-6 1230971-00-2 1230971-01-3 1230971-03-5 1230971-05-7 1230971-06-8 1230971-07-9 1230971-08-0 1230971-09-1 RL: PRPH (Prophetic)

Ι

(2,3-benzodiazepine derivatives and their use as AMPA-receptor inhibitors)

RN 1230970-99-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 8-methoxy-4-methyl-1-phenyl- (CA INDEX NAME)

$$\stackrel{\text{Me}}{\underset{N}{\longrightarrow}} O\text{Me}$$

RN 1230971-00-2 CAPLUS

> 3H-2,3-Benzodiazepine-3-carboxamide, 4,5-dihydro-8-methoxy-N,4-dimethyl-1-phenyl- (CA INDEX NAME)

RN 1230971-01-3 CAPLUS

CN

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-phenyl-(CA INDEX NAME)

- RN 1230971-03-5 CAPLUS
- CN Ethanone, 1-(8-methoxy-4-methyl-1-phenyl-3H-2,3-benzodiazepin-3-yl)- (CA INDEX NAME)

- RN 1230971-05-7 CAPLUS
- CN 5H-2,3-Benzodiazepine, 7-bromo-8-methoxy-4-methyl-1-phenyl- (CA INDEX NAME)

- RN 1230971-06-8 CAPLUS
- CN Methanone, cyclopropy1(8-methoxy-4-methyl-1-phenyl-3H-2,3-benzodiazepin-3yl)- (CA INDEX NAME)

- RN 1230971-07-9 CAPLUS
- CN Ethanone, 1-(7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-phenyl-3H-2,3-

benzodiazepin-3-v1)- (CA INDEX NAME)

- RN 1230971-08-0 CAPLUS
- CN 3H-2,3-Benzodiazepine-3-carboxamide, 7-bromo-4,5-dihydro-8-methoxy-N,4-dimethyl-1-phenyl- (CA INDEX NAME)

- RN 1230971-09-1 CAPLUS
- CN Ethanone, 1-(4,5-dihydro-8-methoxy-4-methyl-1-phenyl-3H-2,3-benzodiazepin-3-yl)- (CA INDEX NAME)

- IT 194671-81-3P 194671-84-6P 194671-86-8P 194671-90-4P 194672-01-0P 194672-05-4P 194672-07-6P 194672-11-2P 194672-15-6P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (preparation of 2,3-benzodiazepines as AMPA receptor inhibitors)
 RN 194671-81-3 CAPLUS
- CN 5H-2,3-Benzodiazepine, 7-bromo-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 194671-84-6 CAPLUS

CN 3H-2,3-Benzodiazepine, 7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 194671-86-8 CAPLUS

CN Ethanone, 1-[7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 194671-90-4 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide,
7-bromo-4,5-dihydro-8-methoxy-N,4-dimethyl-1-(4-nitrophenyl)- (CA INDEX NAME)

- RN 194672-01-0 CAPLUS
- CN 5H-2,3-Benzodiazepine, 7-chloro-8-methoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

- RN 194672-05-4 CAPLUS
- CN Methanone, [7-bromo-8-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

- RN 194672-07-6 CAPLUS
- CN Methanone, [1-(4-aminophenyl)-7-bromo-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

- RN 194672-11-2 CAPLUS
- CN 1-Propanone, 1-[7-bromo-8-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

- RN 194672-15-6 CAPLUS
- CN Methanone, [7-bromo-4,5-dihydro-8-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

IT 194671-83-5P 194671-88-0P 194671-92-6P 194672-03-2P 194672-09-8P 194672-13-4P 194672-16-7P 194672-18-9P 194672-19-0P

194672-20-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,3-benzodiazepines as AMPA receptor inhibitors) RN 194671-83-5 CAPLUS

CN Benzenamine, 4-(7-bromo-8-methoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)(CA INDEX NAME)

RN 194671-88-0 CAPLUS

CN Ethanone, 1-[1-(4-aminophenyl)-4,5-dihydro-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 194671-92-6 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxamide, 1-(4-aminophenyl)-4,5-dihydro-8-methoxy-N,4-dimethyl- (CA INDEX NAME)

- RN 194672-03-2 CAPLUS
- CN Benzenamine, 4-(7-chloro-8-methoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)(CA INDEX NAME)

- RN 194672-09-8 CAPLUS
- CN Methanone, [1-(4-aminophenyl)-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]cyclopropyl- (CA INDEX NAME)

- RN 194672-13-4 CAPLUS
- CN 1-Propanone, 1-[1-(4-aminophenyl)-4,5-dihydro-8-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 194672-16-7 CAPLUS

CN Methanone, [1-(4-aminopheny1)-4,5-dihydro-8-methoxy-4-methy1-3H-2,3-benzodiazepin-3-y1]cyclopropy1- (CA INDEX NAME)

RN 194672-18-9 CAPLUS

CN 3H-2,3-Benzodiazepine-3-carboxylic acid, 1-(4-aminophenyl)-4,5-dihydro-8-methoxy-4-methyl-, methyl ester (CA INDEX NAME)

RN 194672-19-0 CAPLUS

CN Ethanone, 1-[1-(4-aminopheny1)-8-methoxy-4-methy1-3H-2,3-benzodiazepin-3y1]- (CA INDEX NAME)

RN 194672-20-3 CAPLUS
CN 1-Propanone, 1-[8-methoxy-4-methyl-1-(4-nitrophenyl)-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN 1997:518908 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 127:171050

ORIGINAL REFERENCE NO.: 127:32953a.32956a

Human pharmacokinetic study of nerisopam and its TITLE:

N-acetyl metabolite

AUTHOR(S): Rona, Kalman; Arv, Kornelia; Renczes, Gabor; Gachalvi, Bela; Grezal, Gyula; Drabant, Sandor; Csorgo, Margit;

Klebovich, Imre

CORPORATE SOURCE: I. Belgyogyaszati Klinika, klinkai Farmakologiai

Reszleg, Haynal Imre Egeszsegtudomanyi Egyetem, Budapest, Hung.

SOURCE: Acta Pharmaceutica Hungarica (1997), 67(2-3), 65-71

CODEN: APHGAO; ISSN: 0001-6659

PUBLISHER . Ifjusagi Lap- es Konyvkiado Vallalat

DOCUMENT TYPE: Journal

LANGUAGE: Hungarian

It was established during the human phase I study of nerisopam, a new anxiolytic drug, that nerisopam (EGIS-6775) shows 2-compartment behavior, while its N-acetyl metabolite (EGIS-7649) shows 1-compartment pharmacokinetic behavior. Acetylation of nerisopam is polymorphic, so that volunteers belonging to slow or fast acetylating group show significantly different plasma concns. Observed pharmacokinetic differences are primarily manifested in the absorption phase, and not in the elimination one. Accordingly, slow acetylators have higher nerisopam levels, while fast acetylators possess higher metabolite levels. Elimination phase is practically parallel for both compds. At the same time, significant differences are found in the AUC and Cmax values. Nerisopam is rapidly absorbed, but the N-acetyl metabolite appeared especially rapidly in the blood. Our consideration is that nerisopam undergoes significant "first-pass" metabolism, the extent of which is different between

the two acetylator phenotypes. 177034-98-9, Egis-7649

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (human pharmacokinetic study of nerisopam and its N-acetyl metabolite)

177034-98-9 CAPLUS

CN Acetamide, N-[4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)phenyl]-(CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

RN

L22 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:518899 CAPLUS DOCUMENT NUMBER: 127:171049

ORIGINAL REFERENCE NO.: 127:32953a,32956a

Pharmacokinetic study of nerisopam and its N-acetyl TITLE:

metabolite in rats

AUTHOR(S): Arv, Kornelia; Rona, Kalman; Renczes, Gabor; Gachalvi, Bela; Riesz, Tamas; Grezal, Gyula; Es Klebovich, Imre CORPORATE SOURCE: I. Belgyogyaszati Klinika, Klinikai Farmakol. Reszleg,

Haynal Imre Egeszsegtudomanyi Egyetem, Budapest, Hung. SOURCE: Acta Pharmaceutica Hungarica (1997), 67(2-3), 59-63

CODEN: APHGAO; ISSN: 0001-6659

PUBLISHER: Ifjusagi Lap- es Konyvkiado Vallalat

DOCUMENT TYPE: Journal

LANGUAGE: Hungarian

Three doses of nerisopam were administered to rats during a

pharmacokinetic study of nerisopam and plasma concns. of nerisopam and its N-acetyl metabolite were determined in parallel by means of a validated SPE-HPLC method developed by the authors. The pharmacokinetics of nerisopam could be described by a two-compartment open model in rats; it was absorbed rapidly and could be measured in plasma for about 8 h. The peak plasma concentration of the N-acetyl metabolite was reached rapidly a

little

bit later than that of the parent compound, similarly to the human plasma, and it could be measured for about 12 h. The pharmacokinetics of the N-acetyl metabolite could be described by a one-compartment open model. The fast appearance of the metabolite and the Cmax and $AUCO-\infty$ values higher than those of nerisopam refer to an intensive "first-pass" metabolism The AUC-dose curves indicate that supposingly the mechanism transforming the N-acetyl metabolites are not as fast as the acetylation.

177034-98-9, EGIS-7649

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pharmacokinetic study of nerisopam and its N-acetyl metabolite in

RN 177034-98-9 CAPLUS

CN Acetamide, N-[4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)phenyl]-(CA INDEX NAME)

L22 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:251577 CAPLUS

DOCUMENT NUMBER: 125:216

ORIGINAL REFERENCE NO.: 125:31a

Simultaneous determination of nerisopam, a novel TITLE:

> anxiolytic agent showing polymorphic metabolism, and its N-acetvl metabolite from human plasma by a validated high-performance liquid chromatographic

method

AUTHOR(S): Rona, K.; Ary, K.; Gachalyi, B.; Klebovich, I.;

Tomori, E.

CORPORATE SOURCE: Department of I. Medicine, Haynal Imre University of

Medical Sciences,, Budapest, 1389, Hung.

SOURCE: Journal of Chromatography, B: Biomedical Applications

(1996), 678(1), 63-72 CODEN: JCBBEP; ISSN: 0378-4347

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

A sensitive reversed-phase high-performance liquid chromatog, method with UV absorbance detection has been developed to simultaneously determine the concns.

of nerisopam (EGIS-6775) and its N-acetyl metabolite (EGIS-7649) from human plasma. The separation of the investigated compds. and internal

standard was

achieved on a Nucleosil 7 C18 column with 2 mM heptanesulfonic acid containing 0.04 M phosphoric acid-acetonitrile-methanol (70:25:5, volume/volume), pH 2.7 mobile phase. The detection was performed at 385 nm. The compds. were isolated from plasma by Bakerbond C18 solid-phase extraction The limit of quantitation was 10 ng/mL plasma for each compound investigated. The assay has been validated with respect to accuracy, precision and system suitability. All validated parameters were within the necessary limits. On the basis of the sensitivity, linearity and validation parameters, the developed anal. method was suitable for the determination of nerisopam and its N-acetyl metabolite from human plasma and for application in pharmacokinetic studies and human drug monitoring. The pharmacokinetic parameters obtained from twelve human volunteers are reported. It was

found that nerisopam acetylation is polymorphic: the volunteers with fast or slow acetylator phenotypes produced significantly different plasma concns. In slow acetylator phenotypes the concentration of nerisopam was considerably higher in plasma, while the level of its acetyl metabolite was higher in plasma of fast acetylators.

IT 177034-98-9, EGIS 7649

RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process) (simultaneous determination of anxiolytic nerisopam showing polymorphic

metabolism

and its N-acetyl metabolite from human plasma by a validated high-performance liquid chromatog, method in relation to pharmacokinetics in humans)

177034-98-9 CAPLUS RN

Acetamide, N-[4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)phenyl]-CN (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L22 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN 1992:551024 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 117:151024

ORIGINAL REFERENCE NO.: 117:26169a, 26172a

TITLE: Preparation of

1-(3-chlorophenyl)-4-hydroxymethyl-7,8-dimethoxy-5H-

2,3-benzodiazepine as a CNS agent

INVENTOR(S): Andrasi, Ferenc; Botka, Peter; Goldschmidt, Katalin; Hamori, Tamas; Horvath, Gvula; Korosi, Jeno; Moravcsik, Imre; Rusz, Marta; Tomori, Eva; Zolyomi,

Gabor

PATENT ASSIGNEE(S): Egis Gyogyszergyar, Hung.

SOURCE: Brit. UK Pat. Appl., 19 pp. CODEN: BAXXDU

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		DATE	APPLICATION NO.		
	A	19920422			
GB 2248838	В	19940406			
HU 59381	A2	19920528	HU 1990-6469		19901017
HU 207055	В	19930301			
IL 99637	A	19960618	IL 1991-99637		19911002
DK 9101748	A	19920418	DK 1991-1748		19911016
NO 9104056	A	19920421	NO 1991-4056		19911016
RU 2058982	C1	19960427	RU 1991-5010047		19911016
CZ 282249	B6	19970611	CZ 1991-3141		19911016
CA 2053622	A1	19920418	CA 1991-2053622		19911017
FI 9104918	A	19920418	FI 1991-4918		19911017
SE 9103022	A	19920418	SE 1991-3022		19911017
SE 506380	C2	19971208			
FR 2668148	A1	19920424	FR 1991-12807		19911017
FR 2668148	B1	19930730			
AU 9185922	A	19920430	AU 1991-85922		19911017
AU 648111	B2	19940414			
CN 1060838	A	19920506	CN 1991-109753		19911017
CN 1033582	C	19961218			
DE 4134402	A1	19920514	DE 1991-4134402		19911017
NL 9101741	A	19920518	NL 1991-1741		19911017
JP 04282374	A	19921007	JP 1991-298535		19911017
BE 1004995	A3	19930316	BE 1991-952		19911017
US 5204343	A	19930420	US 1991-776771		19911017
ES 2036137	A1	19930501	ES 1991-2303		19911017
ES 2036137	B1	19940301			
CH 682400	A5	19930915	CH 1991-3051		19911017
ZA 9108273	A	19941004	ZA 1991-8273		19911017
AT 399506	В	19950526			19911017
PL 167108	B1	19950731	PL 1991-292091		19911017
RITY APPLN. INFO).:		HU 1990-6469	A	19901017

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

The title compound (I), a CNS agent useful as an anxiolytic, was prepared Thus, racemic 3-(3,4-dimethoxyphenyl)propane-1,2-diol was cyclocondensed with 3-C1C6H4CHO to give 1-(3-chloropheny1)-3-hydroxymethy1-6,7dimethoxyisochroman. This was acetylated by Ac20 then oxidized by Jones

reagent to give 2-(3-acetoxyacetonyl)-3'-chloro-4,5-dimethoxybenzophenone. The latter was cyclocondensed with H2NNH2 to give I. I at 50 mg/kg i.p. in rats gave an increase in number of tolerated shocks from 5.7 \pm 0.6 to 13.8 \pm 3.7 in the "lick-conflict" test, demonstrating the anxiolytic effect of I. I had LD50 of 1309 mg/kg i.p. and \geq 2000 mg/kg orally in mice. Tablets containing I were prepared

IT 142790-94-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as CNS agent)

RN 142790-94-1 CAPLUS

CN 5H-2,3-Benzodiazepine-4-methanol, 1-(3-chlorophenyl)-7,8-dimethoxy- (CA INDEX NAME)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L22 ANSWER 29 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN 1992:482866 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 117:82866

ORIGINAL REFERENCE NO.: 117:14227a,14230a

Pharmacokinetic and metabolism studies on girisopam by TITLE: chromatographic and spectrometric methods in humans AUTHOR(S): Tomori, E.; Horvath, G.; Patfalusi, M.; Meszaros, S.;

Vereczkev, L. CORPORATE SOURCE: Inst. Drug Res., Budapest, H-1325, Hung.

SOURCE: Journal of Chromatography, Biomedical Applications

(1992), 578(1), 91-101

CODEN: JCBADL; ISSN: 0378-4347

DOCUMENT TYPE: Journal English

LANGUAGE:

AB Girisopam possesses a selective anxiolytic action without muscle relaxant and anticonvulsive activity. After a 100-mg oral dose of 14C-labeled girisopam to seven male subjects, the mean recovery of 14C radioactivity was 51% in urine and 33% in feces. A high-performance liquid chromatog. method has been developed for studying girisopam in single-dose pharmacokinetic studies. The serum extract was chromatographed on a normal-phase column using a mobile phase of hexane-ethanol-diethyl ether (66:9:25, volume/volume) and UV detection at 235 nm. The recovery was 60% and the detection limit was 3 ng/mL, using 1 mL of serum. After a 20-min delay, girisopam is rapidly absorbed. After reaching a mean serum level of 178~ng/mL at a mean time of 2.0~h, the serum concentration of girisopam decreased with a mean elimination half-time of 22.2 h. The metabolites were separated by high-performance liquid chromatog., radio thin-layer chromatog, and gas chromatog. Their structures were determined by liquid chromatog.-mass spectrometry, mass spectrometry and gas chromatog.-mass spectrometry. Their chemical structures were confirmed by comparison with synthesized reference compds. The major urinary metabolites were 7-demethylgirisopam (I), 4'-hydroxygirisopam (II) and 4-hydroxymethyl-4-demethylgirisopam (III), which were conjugated, and 4-carboxy-4-demethylgirisopam (V), a compound with an open-chain structure (VII) and traces of 4-demethyl-4-oxogirisopam (VIII) and 4-hydroxymethyl-4-demethylgirisopam (III), which were not conjugated. The metabolic profile in the serum consisted predominantly of the glucuronides of I, II and III. The non-conjugated metabolites were the metabolite with the open-chain structure (VII), III and V. Besides the parent compound, the feces sample contained conjugates of I and II.

142790-94-1 142839-39-2 142839-40-5 142839-41-6 142839-42-7 142839-46-1 142839-47-2 142839-48-3 142839-49-4

RL: PRP (Properties)

(characterization of, as girisopam metabolite, in humans)

142790-94-1 CAPLUS RN

CM 5H-2,3-Benzodiazepine-4-methanol, 1-(3-chlorophenyl)-7,8-dimethoxy- (CA INDEX NAME)

- RN 142839-39-2 CAPLUS
- CN 5H-2,3-Benzodiazepin-7-ol, 1-(3-chlorophenyl)-8-methoxy-4-methyl- (CA INDEX NAME)

- RN 142839-40-5 CAPLUS
- CN Phenol, 2-chloro-4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-(CA INDEX NAME)

- RN 142839-41-6 CAPLUS
- CN 5H-2,3-Benzodiazepine-4-carboxaldehyde, 1-(3-chlorophenyl)-7,8-dimethoxy-(CA INDEX NAME)

RN 142839-42-7 CAPLUS

CN 5H-2,3-Benzodiazepine-4-carboxylic acid, 1-(3-chlorophenyl)-7,8-dimethoxy-(CA INDEX NAME)

RN 142839-46-1 CAPLUS

CN 5H-2,3-Benzodiazepin-7-ol, 1-(3-chloro-4-hydroxyphenyl)-8-methoxy-4-methyl-(CA INDEX NAME)

RN 142839-47-2 CAPLUS

CN B-D-Glucopyranosiduronic acid, [1-(3-chloropheny1)-7,8-dimethoxy-5H-2,3-benzodiazepin-4-y1]methyl (CA INDEX NAME)

Absolute stereochemistry.

RN 142839-48-3 CAPLUS

CN B-D-Glucopyranosiduronic acid, 1-(3-chloropheny1)-8-methoxy-4-methy1-5H-2,3-benzodiazepin-7-y1 (CA INDEX NAME)

Absolute stereochemistry.

RN 142839-49-4 CAPLUS

 $\beta\text{-D-Glucopyranosiduronic acid,} \\ 2-\text{chloro-4-}(7,8-\text{dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)phenyl}$ (CA INDEX NAME)

Absolute stereochemistry.

CN

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L22 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1986:533915 CAPLUS DOCUMENT NUMBER: 105:133915

ORIGINAL REFERENCE NO.: 105:21617a,21620a

TITLE: 5H-2,3-benzodiazepines

INVENTOR(S): Lang, Tibor; Korosi, Jeno; Andrasi, Ferenc; Hamori, Tamas; Zolyomi, Gabor; Elekes, Istvan; Botka, Peter;

Sineger, Eleonora; Goldschmidt, Katalin; et al.

PATENT ASSIGNEE(S): EGIS Gyogyszergyar, Hung.

SOURCE: Fr. Demande, 25 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	D	ATE
				_	
FR 2566774	A1	19860103	FR 1985-9793	1	9850627
FR 2566774	B1	19890317			
HU 37925	A2	19860328	HU 1984-2479	1	9840627
HU 191702	В	19870330			
PRIORITY APPLN. INFO.:			HU 1984-2479 F	1	9840627
OTHER SOURCE(S):	MARPAT	105:133915			
31					

P

AB Title compds. I (R1 = Ph, furyl, naphthyl, thienyl, halo-, hydroxy-, or alkylphenyl, etc.; R2 = H, alkyl; R3 and R4 are alkyl or R3R4 = CR2) were prepared as antiaggressive agents. A 2-acetonylbenzophenone derivative was treated with N2H4 to give I (R1 = 3-ClC6H4, R2 = H, R3 = R4 = Me). In mice, selected I showed antiaggressive activity with ED50 of 16-50 mg/kg orally.

IT	75113-85-8P	75114-07-7P	75114-10-2P
	75114-27-1P	82230-54-4P	82230-56-6P
	82230-58-8P	82230-59-9P	82230-60-2P
	82230-61-3P	88145-29-3P	102771-13-1P
	102771-33-5P	104277-81-8P	104277-82-9P
	104277-83-0P	104277-85-2P	104277-86-3P
	104277-87-4P	104277-88-5P	104277-89-6P
	104277-90-9P	104277-91-0P	104277-92-1P
	104277-93-2P	104277-94-3P	104277-95-4P
	104277-97-6P	104277-99-8P	104278-00-4P
	104278-01-5P	104278-04-8P	104278-05-9P
	104278-06-0P	104278-07-1P	104278-08-2P
	104278-09-3P	104278-10-6P	104278-13-9P

RN

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104278-14-0P
                 104278-16-2P
                                  104278-17-3P
104278-18-4P
                 104278-20-8P
                                  104278-21-9P
104278-23-1P
                 104278-24-2P
                                  104278-27-5P
104299-62-9P
                 104299-63-0P
                                  104299-64-1P
104328-12-3P
                 104328-13-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
   (preparation of, as antiaggressive agent)
75113-85-8 CAPLUS
5H-2,3-Benzodiazepine, 1-(4-chlorophenyl)-7,8-dimethoxy-4-methyl- (CA
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CN 5H-2,3-Benzodiazepine, 1-(4-chlorophenyl)-7,8-dimethoxy-4-methyl- (C. INDEX NAME)

RN 75114-07-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3,4-dimethoxyphenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 75114-10-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

- RN 75114-27-1 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(2-chloropheny1)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 82230-54-4 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

HC1

- RN 82230-56-6 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(3-fluoropheny1)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 82230-58-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-(2-methoxyphenyl)-4-methyl- (CA INDEX NAME)

RN 82230-59-9 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 82230-60-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-(3-methoxyphenyl)-4-methyl- (CA INDEX NAME)

RN 82230-61-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(3-nitrophenyl)- (CA INDEX NAME)

RN 88145-29-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-fluorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 102771-13-1 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 102771-33-5 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chloro-4-nitrophenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 104277-81-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(1-naphthalenyl)- (CA INDEX NAME)

RN 104277-82-9 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(2-naphthalenyl)- (CA INDEX NAME)

RN 104277-83-0 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(2-nitrophenyl)- (CA INDEX NAME)

RN 104277-86-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-diethoxy-4-methyl-1-(3-nitrophenyl)- (CA INDEX NAME)

RN 104277-87-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-chloro-3-nitrophenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 104277-88-5 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(3-methyl-4-nitrophenyl)-(CA INDEX NAME)

RN 104277-89-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(4-methyl-3-nitrophenyl)-(CA INDEX NAME)

RN 104277-90-9 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(5-chloro-2-nitrophenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 104277-91-0 CAPLUS CN Phenol, 4-(7,8-dimethoxy-

Phenol, 4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-2-methoxy-(CA INDEX NAME)

RN 104277-92-1 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-ethoxypheny1)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 104277-93-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-(4-methoxy-3-propylphenyl)-4-methyl-(CA INDEX NAME)

RN 104277-94-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-(4-methoxy-3-pentylphenyl)-4-methyl-(CA INDEX NAME)

RN 104277-95-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-butyl-4-methoxyphenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 104277-97-6 CAPLUS

CN Phenol, 2-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-6-methoxy-(CA INDEX NAME)

RN 104277-99-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-8-ethoxy-7-methoxy-4-methyl-(CA INDEX NAME)

RN 104278-00-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-diethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 104278-01-5 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chloro-3-nitrophenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 104278-04-8 CAPLUS
CN 5H-2,3-Benzodiazepine, 7,8-dibutoxy-1-(3-chloropheny1)-4-methyl-,
hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 104278-05-9 CAPLUS CN 1,2-Benzenediol, 3-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-(CA INDEX NAME)

RN 104278-06-0 CAPLUS
CN 5H-2,3-Benzodiazepine, 1-(3,4-dimethylphenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 104278-07-1 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3,4-dibutoxyphenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 104278-08-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-ethyl-4-methoxyphenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 104278-09-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-4-methyl-7,8-bis(octyloxy)- (CA INDEX NAME)

- RN 104278-10-6 CAPLUS
- CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-[4-methoxy-3-(1-methylpropyl)phenyl]-4-methyl- (CA INDEX NAME)

- RN 104278-13-9 CAPLUS
- CN 5H-2,3-Benzodiazepine, 7,8-diethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

- RN 104278-14-0 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-[4-(1,1-dimethylethyl)phenyl]-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 104278-16-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-diethoxy-1-(4-methoxy-3-methylphenyl)-4-methyl(CA INDEX NAME)

RN 104278-17-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chloro-4-methoxyphenyl)-7,8-diethoxy-4-methyl-(CA INDEX NAME)

RN 104278-18-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3,4-diethoxyphenyl)-7,8-diethoxy-4-methyl- (CA INDEX NAME)

RN 104278-20-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-bromopheny1)-7,8-dimethoxy-4-methy1- (CA INDEX NAME)

RN 104278-21-9 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4,5-dimethoxy-2-nitrophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 104278-23-1 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-7,8-dimethoxy-4-methyl-, hydrobromide (1:1) (CA INDEX NAME)

• HBr

RN 104278-24-2 CAPLUS CN 5H-2,3-Benzodiazepine, 1-(3-chloropheny1)-7,8-diethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HC1

RN 104278-27-5 CAPLUS CN 5H-2,3-Benzodiazepine, 7,8-dibutoxy-1-(3-chlorophenyl)-4-methyl- (CA INDEX NAME)

RN 104299-62-9 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-[3-methoxy-4-(1-methylethoxy)phenyl]-4-methyl- (CA INDEX NAME)

RN 104299-63-0 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-7,8-diethoxy-4-methyl- (CA INDEX NAME)

RN 104299-64-1 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-[4-methoxy-3-(1-methylethyl)phenyl]4-methyl- (CA INDEX NAME)

- RN 104328-12-3 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(2-chloro-5-nitrophenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

- RN 104328-13-4 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(3-chloro-4-nitrophenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

OS.CITING REF COUNT:

1

- THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD
 (6 CITINGS)
- REFERENCE COUNT:
- THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 31 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1986:460584 CAPLUS DOCUMENT NUMBER: 105:60584

ORIGINAL REFERENCE NO.: 105:9907a,9910a

TITLE: Derivatives of 2,3-benzodiazepine

AUTHOR(S): Gatta, F.; Piazza, D.; Del Giudice, M. R.; Massotti,

CORPORATE SOURCE: Lab. Chim. Farm., Ist. Super. Sanita, Rome, Italy

SOURCE: Farmaco, Edizione Scientifica (1985), 40(12), 942-55

CODEN: FRPSAX; ISSN: 0430-0920

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 105:60584 GT

AB 2,3-Benzodiazepines [I, R = H, Me or Et, R1 = H, C1, F or 3,4-(MeO)2] or II [R = 7-MeO or 7,8-(MeO)2, R1 = H, MeO, or C1, R2 = H or Me] were prepared by condensation of ketones (III or IV) with hydrazines. 1-Aryl-6,7-dimethoxyisochromans, obtained by condensation of 3,4-dimethoxyphenylalkanols with aromatic aldehydes, were oxidized by CrO3 to give III. Reduction of I with NaBH4 gave the corresponding 3,4-dihydro derivs. while refluxing in Ac20 gave 3-acetyl-1-aryl-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepines. The compds. were evaluated with respect to their ability to bind to benzodiazepine receptors by displacement of specific 3H-diazepam binding. Only II (R = 7-MeO, R1 = 3-MeO, R2 = H) showed an affinity for the receptors similar to other know benzodiazepines. Other compds. exhibited lower inhibitory concns. 75114-27-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and biol. activity of)

RN 75114-27-1 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 75113-85-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-chlorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 75114-07-7 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(3,4-dimethoxyphenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 75114-10-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 84351-27-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(2-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 88145-29-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-fluoropheny1)-7,8-dimethoxy-4-methy1- (CA INDEX NAME)

RN 102719-54-0 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(4-fluoropheny1)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 102719-60-8 CAPLUS

CN Ethanone, 1-(7,8-dimethoxy-4-methyl-1-phenyl-3H-2,3-benzodiazepin-3-yl)-(CA INDEX NAME)

RN 102719-61-9 CAPLUS

CN Ethanone, 1-[1-(2-chlorophenyl)-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 102719-62-0 CAPLUS

CN Ethanone, 1-[1-(4-fluorophenyl)-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 102727-89-9 CAPLUS

CN 3H-2,3-Benzodiazepine, 4,5-dihydro-7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 102727-90-2 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(4-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 102727-91-3 CAPLUS

CN 3H-2,3-Benzodiazepine, 1-(3,4-dimethoxyphenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 102727-95-7 CAPLUS

CN Ethanone, 1-[1-(4-chlorophenyl)-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

RN 102727-96-8 CAPLUS

CN Ethanone, 1-[1-(3,4-dimethoxyphenyl)-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L22 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1986:400639 CAPLUS

DOCUMENT NUMBER: 105:639

ORIGINAL REFERENCE NO.: 105:121a

TITLE: 1-(Aminophenyl)-4-methyl-5H-2,3-

benzodiazepinedervatives, their preparation, and drugs

containing them

Lang, Tibor; Korosi, Jeno; Andrasi, Ferenc; Botka, INVENTOR(S): Peter; Hamori, Tamas; Berzsenyi, Pal; Goldschmidt,

Katalin; Zolyomi, Gabor; Elekes, Istvan; Lang,

Zsuzsanna

PATENT ASSIGNEE(S): EGYT Gyogyszervegyeszeti Gyar, Hung.

SOURCE: Ger. Offen., 33 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent. German

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE		DATE
DE 3527117	A1	19860130	DE 1985-3527117	19850729
DE 3527117	C2 A2	19960808		
HU 38324	A2	19860528	HU 1984-2882	19840727
HU 191698	В	19870330		
CH 667090	A5	19880915	CH 1985-3011	19850711
BE 902953	A1	19860122	BE 1985-11304	19850722
AT 8502201	A	19910115	AT 1985-2201	19850725
AT 393123	В	19910826		
DK 8503406	A	19860128	DK 1985-3406	19850726
DK 158727	В	19900709		
DK 158727	C	19901210		
FI 8502906	A	19860128	FI 1985-2906	19850726
FI 84821	В	19911015		
FI 84821	C	19920127		
NO 8502973	A	19860128	NO 1985-2973	19850726
NO 162115	В	19890731		
NO 162115	С	19891108		
SE 8503613	A	19860128	SE 1985-3613	19850726
SE 465777	В	19911028		
SE 465777	c	19920220		
GB 2162184	A	19860129	GB 1985-18971	19850726
GB 2162184	В	19871231		
FR 2568252	A1	19860131	FR 1985-11444	19850726
FR 2568252	B1	19870320		
NL 8502141	A	19860217	NL 1985-2141	19850726
JP 61043174	A	19860301	JP 1985-164192	19850726
JP 04013347	В	19920309	01 1300 101132	15050120
DD 236527	A5	19860611	DD 1985-279022	19850726
US 4614740	A	19860930	US 1985-759169	19850726
CS 251795	B2	19870813	CS 1985-5526	19850726
PL 145089	B1	19880831	PL 1985-254701	19850726
CA 1277660	C	19901211	CA 1985-487625	19850726
RIORITY APPLN. INF		17701211		19840727
			nu 1904-2002 A	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 105:639

AB The title compds. I (R, Rl = H, Cl, Cl-4 alkyl or alkoxy; R2 = H, Cl-4 alkyl; R3, R4 = Cl-4 alkyl, or R3R4 = CH2) and their salts show anti-aggressive, anxiolytic, narcosis-potentiating, and hypnotic activity on the central nervous system and inhibit psychomotor hyperactivity. I (R3R4 = CH2) also showed muscle relaxant and spasmolytic activity. For example, 1-(4'-aminophenyl)-4-methyl-7,8-dimethoxy-5H-2,3-benzodiazepine was prepared by reduction of the corresponding nitro compound with H2 and a

Pd/C catalvst.

IT 102771-13-1 102771-33-5
 RL: RCT (Reactant); RACT (Reactant or reagent)

(hydrogenation of) 102771-13-1 CAPLUS

RN 102771-13-1 CAPLUS CN 5H-2,3-5enzodiazepine, 7,8-dimethoxy-4-methyl-1-(4-nitrophenyl)- (CA INDEX NAME)

RN 102771-33-5 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chloro-4-nitrophenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of and aggression and anxiety inhibition by)

RN

102771-14-2 CAPLUS
Benzenamine, 4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-, CN hydrochloride (1:1) (CA INDEX NAME)

HC1

RN 102771-15-3 CAPLUS

CN Benzenamine, 4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-, hydrochloride (1:2) (CA INDEX NAME)

10/567,598

●2 HC1

CN

102771-16-4 CAPLUS Benzenamine, 4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-, sulfate (1:1) (CA INDEX NAME)

CM 1

CRN 102771-12-0 CMF C18 H19 N3 O2

CM 2

CRN 7664-93-9 CMF H2 O4 S

- RN 102771-17-5 CAPLUS
- CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(3-methylphenyl)- (CA INDEX NAME)

- RN 102771-18-6 CAPLUS
- CN Benzenamine, 3-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-, hydrochloride (1:1) (CA INDEX NAME)

- HC1
- RN 102771-19-7 CAPLUS
- CN Benzenamine, 3-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-, hydrochloride (1:2) (CA INDEX NAME)

10/567,598

●2 HC1

RN 102771-20-0 CAPLUS

CN Benzenamine, 2-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

RN 102771-21-1 CAPLUS

CN Benzenamine, 2-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 102771-22-2 CAPLUS

CN Benzenamine, 3-(7,8-diethoxy-4-methy1-5H-2,3-benzodiazepin-1-y1)- (CA INDEX NAME)

RN 102771-24-4 CAPLUS

CN Benzenamine, 2-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-4,5dimethoxy- (CA INDEX NAME)

RN 102771-28-8 CAPLUS

CN Benzenamine, 4-chloro-2-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-(CA INDEX NAME)

RN

 $\begin{array}{lll} 102771-29-9 & CAPLUS \\ Benzenamine, & 4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-methyl-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepi$ CN (CA INDEX NAME)

RN 102771-32-4 CAPLUS CN Benzenamine, 3-chloro-4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-(CA INDEX NAME)

102771-34-6 CAPLUS RN CN

Benzenamine, 2-chloro-5-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-(CA INDEX NAME)

RN

 $\begin{array}{lll} 102771-35-7 & CAPLUS \\ Benzenamine, & 5-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-5H-2,3-benzodiazepin-1-yl)-2-methyl-3-benzodiazepin-1-yl)-2-methyl-3-benzodiazepin-1-yl)-2-methyl-3-benzodiazepin-1-yl)-2-methyl-3-benzodiazepin-1-yl)-2-methyl-3-benzodiazepin-1-yl)-2-methyl-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiazepin-1-yl)-3-benzodiaze$ CN (CA INDEX NAME)

RN 102771-37-9 CAPLUS
CN Benzenamine, 4-(7,8-diethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)- (CA INDEX NAME)

RN 102771-38-0 CAPLUS
CN Benzenamine, 2-chloro-4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)(CA INDEX NAME)

10/567,598

OS.CITING REF COUNT:

- 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
- REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/567.598

L22 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1985:24603 CAPLUS DOCUMENT NUMBER: 102:24603

ORIGINAL REFERENCE NO.: 102:4063a,4066a

TITLE: A convenient preparation of 14C-labeled

5H-2,3-benzodiazepines

AUTHOR(S): Zolyomi, G.; Lang, T.; Korosi, J.; Hamori, T.

CORPORATE SOURCE: Inst. Drug Res., Budapest, H-1325, Hung.

SOURCE: Journal of Labelled Compounds and Radiopharmaceuticals

(1984), 21(8), 751-7

CODEN: JLCRD4; ISSN: 0362-4803

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 102:24603

GI

AB Phenylacetones I (R = Et, R1 = Me; R = H, R1 = Me, Et) were acylated with H0214CR2 [R2 = C6H3(OMe)2-3,4; C6H4Cl-3] and treated with H2NNH2 to give benzodiazepines II in 10.5-23.0% chemical yield, with activities of 0.73-0.74 GBg/mmol. II [R = Et, R1 = Me, R2 = C6H3(OMe)2-3,4) is 14-labeled tofisopam.

93635-49-5P 93635-51-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 93635-49-5 CAPLUS

CN 5H-2,3-Benzodiazepine-1-14C, 1-(3-chlorophenyl)-7,8-diethoxy-4-methyl-(9CI) (CA INDEX NAME)

RN 93635-51-9 CAPLUS

CN 5H-2,3-Benzodiazepine-1-14C, 1-(3-chloropheny1)-7,8-dimethoxy-4-methy1-(9CI) (CA INDEX NAME)

10/567.598

L22 ANSWER 34 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1984:209765 CAPLUS DOCUMENT NUMBER: 100:209765

DOCUMENT NUMBER: 100:209/65

ORIGINAL REFERENCE NO.: 100:31855a,31858a

TITLE: Heterocyclic compounds, VI. Formation of isomers in

the acylation of compounds with a

1-aryl-4-methyl-5H-2,3-benzodiazepine skeleton
AUTHOR(S): Korosi, Jeno; Lang, Tibor; Sohar, Pal; Neszmelyi,

Andras; Horvath, Gyula; Zolyomi, Gabor

CORPORATE SOURCE: Inst. Res. Med. Prep., Budapest, H-1325, Hung.

SOURCE: Chemische Berichte (1984), 117(4), 1476-86

CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 100:209765

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Acetylating benzodiazepine I with hot Ac20 gave 1:1 proportions of isomers II (R = Me) and III (R = Me). Acetylating I in pyridine gave exclusively II (R = Me) whereas I.HCl in hot Ac20 gave only III (R = Me). II and III (R = Me) could not be mutually converted into one another. III (R = Me) was prepared from II (R = Me) vai quaternary salt IV (RI = Ac). Although III (R = Me) was resistant to aqueous hydrolysis, II (R = Me) was cleaved to benzene derivative V (R = Me). II, III, and V (R = Et) were prepared with (StCO)20 and III (R = Ph) from IV (RI = H) and Bz20. I-J3C and III-J3C (R = Me) were prepared for 13C NMR assignments. Analogs of II and III (R = Me) were also prepared

IT 90140-69-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and acetylation of)

RN 90140-69-5 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chloropheny1)-7,8-dimethoxy-4-methy1-, hydrochloride (1:?) (CA INDEX NAME)

●x HCl

IT 90140-68-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 90140-68-4 CAPLUS

CN Ethanone, 1-[1-(3-chlorophenyl)-7,8-dimethoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L22 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1984:45307 CAPLUS DOCUMENT NUMBER: 100:45307

ORIGINAL REFERENCE NO.: 100:45307

TITLE: 1-(4'-Fluorophenyl)-4-methyl-7,8-

dimethoxybenzodiazepine

INVENTOR(S): Beck, Ivan; Csondes, Janos; Rakoczi, Jozsef; Petocz,

Lujza E.; Kosoczky, Ibolya; Grasser, Katalin
PATENT ASSIGNEE(S): EGYT Gyogyszervegyeszeti Gyar, Hung.

SOURCE: EGII Gyogyszervegyeszeti Gyar, Hung SOURCE: Hung. Telies, 12 pp.

OURCE: Hung. Teljes, 12 pp.
CODEN: HUXXBU

DOCUMENT TYPE: Patent
LANGUAGE: Hungarian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	API	PLICATION NO.	DATE
HU 25078	A2	19830530	HU	1978-EE2599	19781102
HU 184079	В	19840628			
PRIORITY APPLN. INFO.:			HU	1978-EE2599	19781102
OTHER SOURCE(S):	CASREA	CT 100:45307			

GI

AB 1-(4'-Fluorophenyl)-4-methyl-7,8-dimethoxy-5H-2,3-benzodiazepine (I) [
88145-29-3] is a tranquilizer and an antidepressant. The tranquilizing effect on mice (inhibition of motility and of amphetamine action, and potentiation of hexobarbital-induced narcosis) was comparable to that of tofisopam, and the antidepressant effect to that of amitriptyline. Thus, I was prepared by the reaction of 3,4-dimethoxybenzyl Me ketone [776-99-8] with 4-fluorobenzyl chloride [352-11-4], in the presence of the anhydrous AlCl3,conversion of the 1-(4'-fluorophenyl)-3-methyl-6,7-benzopyrilium salt formed into 2-(4'-fluorobenzoyl)-4,5-dimethoxybenzyl Me ketone, and reaction of the latter with H2NNH2:HCL in the presence of Et3N, to give I.

11 88145-29-3P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and antidepressant and tranquilizing activity of)

RN 88145-29-3 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-fluorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

L22 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1983:53947 CAPLUS DOCUMENT NUMBER: 98:53947

ORIGINAL REFERENCE NO.: 98:8305a,8308a

TITLE: 3,4-Dihydro-5H-2,3-benzodiazepine derivatives

INVENTOR(S): Korosi, Jeno; Lang, Tibor; Andrasi, Ferenc; Szekely, Joszef; Hamori, Tamas; Balogh, Tibor; Ila, Lajos; Goldschmidt, Katalin; Sineger, Eleonora; Moravcsik,

Imre

PATENT ASSIGNEE(S): E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.

SOURCE:

Belg., 24 pp.

CODEN: BEXXAL DOCUMENT TYPE: Patent

LANGUAGE: French FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
BE 892395	A1	19820908			
HU 27685	A2	19831028	HU 1981-620		19810312
HU 186760	В	19850930			
IL 65076	A	19841231	IL 1982-65076		19820222
US 4423044		19831227	US 1982-352346		19820225
FR 2501686	A1	19820917	FR 1982-3989		19820310
FR 2501686	B1	19850301			
DK 8201068	A	19820913	DK 1982-1068		19820311
FI 8200839			FI 1982-839		19820311
NO 8200798	A	19820913	NO 1982-798		19820311
SE 8201537	A	19820913	SE 1982-1537		19820311
AU 8281308		19820916	AU 1982-81308		19820311
AU 550388	B2	19860320			
JP 57159772	A	19821001	JP 1982-38847		19820311
NL 8201005		19821001			19820311
GB 2097387	A	19821103	GB 1982-7168		19820311
GB 2097387	В	19840919			
	A1	19841127	CA 1982-398115		19820311
CH 648553	A5	19850329	CH 1982-1490		19820311
AT 8200969	A	19861015	AT 1982-969		19820311
AT 383120	В	19870525			
DE 3209100	A1	19821028	DE 1982-3209100		19820312
DD 204698	A5	19831207	DD 1982-238112		19820312
CS 224646	B2	19840116	CS 1982-1739		19820312
SU 1151206	A3	19850415	SU 1982-3404160		19820312
IORITY APPLN. INFO.:			HU 1981-620	A	19810312

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 98:53947

GI

Ι

- AB Benzodiazepines I (R = Ph, substituted Ph; Rl = H, alkyl; R2,R3 = H, alkoxy, cycloalkoxy, PhCH2O) were prepared by borohydride reduction of 3,4-didehydro derivs. of I. Thus, I (R = 3-CLG6H4, Rl = Me, R2 = R3 = OMe, II) was obtained in 85.5% yield by NaBH4 reduction of its 3,4-didehydro derivative At 25 mg/kg orally in mice II had 3.63 times the central nervous system depressant activity of tofisopam.
- IT 84351-14-4P 84351-21-3P 84351-27-9P 84351-29-1P 84351-30-4P RI: SPN (Synthetic preparation); PREP (Preparation) (repearation and central nervous system decressant activity of)
- RN 84351-14-4 CAPLUS
- CN 3H-2,3-Benzodiazepine, 1-(3-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 84351-21-3 CAPLUS
- CN 3H-2,3-Benzodiazepine, 1-(3-fluorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 84351-27-9 CAPLUS
- CN 3H-2,3-Benzodiazepine, 1-(2-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methy1- (CA INDEX NAME)

- RN 84351-29-1 CAPLUS
- CN 3H-2,3-Benzodiazepine, 1-(3,4-dichlorophenyl)-4,5-dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 84351-30-4 CAPLUS
- CN 3H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-7,8-diethoxy-4,5-dihydro-4-methyl- (CA INDEX NAME)

- IT 84351-15-5P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

- RN 84351-15-5 CAPLUS
- CN 3H-2,3-Benzodiazepine, 1-(3-chloropheny1)-4,5-dihydro-7,8-dimethoxy-4-methy1-, hydrochloride (1:1) (CA INDEX NAME)

● HC1

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L22 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1982:423830 CAPLUS DOCUMENT NUMBER: 97:23830

ORIGINAL REFERENCE NO.: 97:4177a,4180a

TITLE: 5H-2,3-Benzodiazepine derivatives

INVENTOR(S): Korosi, Jeno; Lang, Tibor; Szekely, Jozsef; Andrasi, Ferenc; Zolyomi, Gabor; Borsi, Jozsef; Goldschmidt,

Katali; Hamori, Tamas; Szabo, Gabriella; et al.

Hung. PATENT ASSIGNEE(S):

SOURCE: U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 86,047,

abandoned. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4322346 HU 21372 HU 179018	A A2 B	19820330 19811128 19820828	US 1980-191811 HU 1978-GO1426	19800926 19781019
PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI	MARPAT	97:23830	HU 1978-G01426 A US 1979-86047 A	19781019 2 19791018

AB Benzodiazepines I (R = halogen, CF3) were prepared Thus, treatment of pyrylium salt II with N2H4 gave 72.5% III. I (R = 3-C1) had a

tranquilizer activity ED50 in the mouse fighting test of 16 mg/kg orally. 75113-85-8P

- Rl: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 - (preparation and alkylation of)
- RN 75113-85-8 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(4-chlorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- IT 82230-56-6P 82230-58-8P 82230-59-9P
- 82230-60-2P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and tranquilizing activity of)
- RN 82230-56-6 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(3-fluorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 82230-58-8 CAPLUS
- CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-(2-methoxyphenyl)-4-methyl- (CA INDEX NAME)

RN 82230-59-9 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 82230-60-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-1-(3-methoxyphenyl)-4-methyl- (CA INDEX NAME)

IT 75114-07-7P 75114-10-2P 75114-14-6P 82230-54-4P 82230-61-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of) RN 75114-07-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3,4-dimethoxyphenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

10/567,598

RN 75114-10-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 75114-14-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chloropheny1)-7,8-dimethoxy-4-methy1-, hydrochloride (1:1) (CA INDEX NAME)

● HC1

RN 82230-54-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

HC1

RN 82230-61-3 CAPLUS CN 5H-2,7-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-(3-nitrophenyl)- (CA INDEX NAME)

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1981:103443 CAPLUS

DOCUMENT NUMBER: 94:103443
ORIGINAL REFERENCE NO.: 94:16891a.16894a

ORIGINAL REFERENCE NO.: 94:16891a,16894a TITLE: Benzodiazepines

INVENTOR(S): Korosi, Jeno; Lang, Tibor; Szekely, Jozsef; Anrasi, Ferenc; Zolyomi, Gabor; Borsy, Jozsef; Goldschmidt, Katalin; Hamori, Tames; Szabo, Gabriella; et al.

PATENT ASSIGNEE(S): E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.

SOURCE: Brit. UK Pat. Appl., 14 pp.

CODEN: BAXXDU
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2034706	A	19800611	GB 1979-36185	19791018
GB 2034706	В	19820804		
PRIORITY APPLN. INFO.: GI			HU 1978-G1426 A	19781019

AB Benzodiazepines I (R = H, C1-5 alkyl, dialkylaminoalkyl, NH2, alkylamino, dialkylamino, styryl, optionally substituted aralkyl or aryl, heterocyclyl containing 1-2 N, O, and/or S atoms; R1 = H, C1-4 alkyl, CH2OH, CHO, CO2H, alkoxycarbonyl, heterocyclyl; R2 = H, C1-4 alkyl, dialkylaminoalkyl, alkylamino, dialkylamino, aryl; R3, R4 = H, halo, NO2, NH2, acyloxy, C1-3 alkyl, C1-5 alkoxy, dialkylaminoalkoxy, araloxy or R3R4 = methylenedioxy or carbonic acid residue) were prepared I have significant effects on the central nervous system, decreasing spontaneous motor activity and potentiating the effect of narcotics (assessed in mice). E.g., I (R = C6H4C1-4, R1 = Me, R2 = H, R3 = R4 = OMe) was prepared by cyclocondensation of 1-(4-chlorophenyl)-3-methyl-6,7-dimethoxy-2-benzopyrylium perchlorate with N2H4.H2O (MeOH, reflux).

IT 75113-85-8P 75113-89-2P 75113-91-6P 75114-07-7P 75114-10-2P 75114-12-4P 75114-13-5P 75114-12-6P 75114-26-0P 75114-27-1P 75114-28-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as motor activity suppressant and narcotic potentiator)

RN 75113-85-8 CAPLUS
CN 5H-2.3-Benzodiazenine, 1-(4-chlor

CN 5H-2,3-Benzodiazepine, 1-(4-chlorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 75113-89-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 5-(3,4-dimethoxyphenyl)-7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 75113-91-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 5-(3,4-dimethoxyphenyl)-7,8-dimethoxy-1-(4-methoxyphenyl)-4-methyl- (CA INDEX NAME)

RN 75114-07-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3,4-dimethoxyphenyl)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 75114-10-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 75114-12-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-iodopheny1)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 75114-13-5 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-diethoxy-4-methyl- (CA INDEX NAME)

RN 75114-14-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

HC1

RN 75114-16-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-fluorophenyl)-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HC1

RN 75114-26-0 CAPLUS
CN 5H-2,3-Benzodiazepine, 1-(2-iodopheny1)-7,8-dimethoxy-4-methyl-,
hydrochloride (1:1) (CA INDEX NAME)

● HC1

RN 75114-27-1 CAPLUS
CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 75114-28-2 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(2-fluorophenyl)-7,8-dimethoxy-4-methyl- (CA

INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L22 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1981:65733 CAPLUS DOCUMENT NUMBER: 94:65733

ORIGINAL REFERENCE NO.: 94:10721a,10724a

Benzodiazepines

PATENT ASSIGNEE(S): E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55092377	76	19800712	JP 1979-134718	
JP 63050354 HU 21372 HU 179018 AT 7906472 AT 373589	B	19881007		
HU 21372	A2	19811128	HU 1978-G01426	19781019
HU 179018	В	19820828		
AT 7906472	A	19830615	AT 1979-6472	19791004
AT 373589	В	19840210		
SE 7908481	A	19800420	SE 1979-8481	19791012
SE 439919	В	19850708		
SE 439919	С	19851017		
BE 879404	A1	19800415	BE 1979-9569	19791015
FI 7903209	A	19800420	FI 1979-3209	19791016
FI 66604	В	19840731		
FI 66604	С	19841112		
FI 7903209 FI 66604 FI 66604 FR 2439189	A1	19800516	FR 1979-25698	19791016
FR 2439189	B1	19841130		
AU 532079		19830915	AU 1979-51817	19791016
CH 643835	A5	19840629	CH 1979-9292	19791016
CS 236456	B2	19850515	CS 1979-7020	19791016
DD 146596	A5 A B C	19810218	DD 1979-216290 DK 1979-4401	19791017
DK 7904401	A	19800420	DK 1979-4401	19791018
DK 155327	В	19890328		
DK 155327	С	19890821		
NL 7907692	A	19800422	NL 1979-7692	19791018
NL 190552	В	19931116		
NT. 190552	_	19940418		
NO 7903349 NO 152048 NO 152048	A	19800422	NO 1979-3349	19791018
NO 152048	В	19850415		
NO 152048	С	19850724		
CA 1125749	A1	19820615	CA 1979-337955	19791018
PL 124063		19821231	PL 1979-219034	
	A3			
RITY APPLN. INFO.:			HU 1978-G01426	

GI

AB 5H-2,3-Benzodiazepines I [R = H, alkyl, (substituted) amino, halo, OH, acyloxy, NO2, etc.; R1 = H, alkyl, CHO, CO2N, aryl, aralkoxy; R2 = H, alkyl, (substituted) amino, aryl, R3, R4 = H, halo, NO2, OH, NH2, alkoxy, aryl, etc.] were prepared by cyclization of N2H4 with II, III, IV, or V [X = anion, R5, R6 = H, alkyl, halo, OH, (substituted) amino, acyloxy, NO2, etc.]. I are enhancers of anesthetics. Thus, heating III (R = 4-C1C6H4, R1 = Me, R2 = H, R3 = R4 = MeO, X = ClO4) with N2H4 in MeOH to boil gave 72.5% corresponding I. ΙT 75113-85-8P 75113-89-2P 75113-91-6P 75114-10-2P 75114-12-4P 75114-07-7P

75114-07-7P 75114-10-2P 75114-12-4P 75114-13-5P 75114-14-6P 75114-16-8P 75114-26-0P RE: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 75113-85-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-chlorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 75113-89-2 CAPLUS
- CN 5H-2,3-Benzodiazepine, 5-(3,4-dimethoxyphenyl)-7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

- RN 75113-91-6 CAPLUS
- CN 5H-2,3-Benzodiazepine, 5-(3,4-dimethoxyphenyl)-7,8-dimethoxy-1-(4-methoxyphenyl)-4-methyl- (CA INDEX NAME)

RN 75114-07-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3,4-dimethoxypheny1)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 75114-10-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 75114-12-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-iodopheny1)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 75114-13-5 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-diethoxy-4-methyl- (CA INDEX NAME)

RN 75114-14-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

HC1

RN 75114-16-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-fluorophenyl)-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 75114-26-0 CAPLUS
CN 5H-2,3-Benzodiazepine, 1-(2-iodopheny1)-7,8-dimethoxy-4-methyl-,
hydrochloride (1:1) (CA INDEX NAME)

● HCl

L22 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1980:568318 CAPLUS DOCUMENT NUMBER: 93:168318

ORIGINAL REFERENCE NO.: 93:26814h,26815a

TITLE: 5H-2,3-Benzodiazepine derivatives and their

pharmaceutical use

INVENTOR(S): Korosi, Jeno; Lang, Tibor; Szekelv, Jozsef; Andrasi, Ferenc; Zolyomi, Gabor; Borsy, Jozsef; Goldschmidt, Katalin; Hamori, Tamas; Szabo, Gabriella; et al.

PATENT ASSIGNEE(S): E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.

SOURCE: Ger. Offen., 78 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
DE 2940483	A1	19800430	DE 1979-2940483		19791005
DE 2940483	C2	19890622			
HU 21372	A2	19811128	HU 1978-G01426		19781019
HU 179018	В	19820828			
AT 7906472	A	19830615	AT 1979-6472		19791004
AT 373589	В	19840210			
SE 7908481	A	19800420	SE 1979-8481		19791012
SE 439919	В	19850708			
SE 439919	C	19851017			
BE 879404	A1	19800415	BE 1979-9569		19791015
FI 7903209	A	19800420	FI 1979-3209		19791016
FI 66604	В	19840731			
FI 66604	C	19841112			
FR 2439189	A1	19800516	FR 1979-25698		19791016
FR 2439189	B1	19841130			
AU 532079	B2	19830915	AU 1979-51817		19791016
CH 643835	A5	19840629	CH 1979-9292		19791016
CS 236456	B2	19850515	CS 1979-7020		19791016
DD 146596	A5	19810218	DD 1979-216290		19791017
DK 7904401	A	19800420	DK 1979-4401		19791018
DK 155327	В	19890328			
DK 155327	c	19890821			
NL 7907692	A	19800422	NL 1979-7692		19791018
NL 190552	В	19931116			
NL 190552	С	19940418			
NO 7903349	A	19800422	NO 1979-3349		19791018
NO 152048	В	19850415			
NO 152048	С	19850724			
CA 1125749	A1	19820615	CA 1979-337955		19791018
PL 124063	B1	19821231	PL 1979-219034		19791018
SU 1402258	A3	19880607	SU 1979-2832177		19791018
PRIORITY APPLN. INFO.:			HU 1978-G01426	A	19781019

GI

AB Benzodiazepines I (R = H, Cl-5 alkyl, alkylamino, dialkylaminoalkyl, dialkylamino (optionally substituted), styryl, C7-10 phenylalkyl, O-, N-, or S-heterocyclyl; Rl = H, Cl-4 alkyl, CH2OH, CHO, CO2H, carbalkoxy, optionally substituted acyl or aryl; R2 = H, optionally substituted acyl, aralkoxy, Cl-4 alkyl, dialkylaminoalkyl or (di)alkylamino, R3R4 = OCH2O, carbonic acid moiety; R3, R4 independently = H, halo, NO2, NH2, OH, acyloxy, Cl-3 alkyl optionally substituted with dialkylamino, carbalkoxy, Cl-5 alkoxy, dialkylaminoalkyl, halo (un)substituted aralkoxyl, useful as central nervous system depressants and narcotics potentiators (data tabulated), were prepared by several methods. Thus, treating NH2NH2.H2O with benzopyrylium salt II suspended in boiling MeOH gave 70.8% recrystd. benzodiazepine III. I (R = Fh, R1 = Me, R2 = Et, R3 = R4 = MeO) had ED50 35 mg/kg (mice) in inhibiting aggressiveness and gave 181% increase at 25 mg/kg (mice) in potentiation of hexobarbital Na

IT 75113-85-8P 75113-89-2P 75113-91-6P 75114-07-7P 75114-10-2P 75114-12-4P 75114-13-5P 75114-46P 75114-16-8P 75114-26-0P 75114-27-1P 75114-28-2P RE: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 75113-85-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(4-chloropheny1)-7,8-dimethoxy-4-methy1- (CA INDEX NAME)

- RN 75113-89-2 CAPLUS
- CN 5H-2,3-Benzodiazepine, 5-(3,4-dimethoxyphenyl)-7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

- RN 75113-91-6 CAPLUS
- CN 5H-2,3-Benzodiazepine, 5-(3,4-dimethoxyphenyl)-7,8-dimethoxy-1-(4-methoxyphenyl)-4-methyl- (CA INDEX NAME)

RN 75114-07-7 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(3,4-dimethoxypheny1)-7,8-dimethoxy-4-methyl-(CA INDEX NAME)

RN 75114-10-2 CAPLUS

CN 5H-2,3-Benzodiazepine, 7,8-dimethoxy-4-methyl-1-phenyl- (CA INDEX NAME)

RN 75114-12-4 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-iodopheny1)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

RN 75114-13-5 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-diethoxy-4-methyl- (CA INDEX NAME)

RN 75114-14-6 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HC1

RN 75114-16-8 CAPLUS

CN 5H-2,3-Benzodiazepine, 1-(2-fluorophenyl)-7,8-dimethoxy-4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HC1

RN 75114-26-0 CAPLUS
CN 5H-2,3-Benzodiazepine, 1-(2-iodopheny1)-7,8-dimethoxy-4-methyl-,
hydrochloride (1:1) (CA INDEX NAME)

● HC1

RN 75114-27-1 CAPLUS
CN 5H-2,3-Benzodiazepine, 1-(2-chlorophenyl)-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

- RN 75114-28-2 CAPLUS
- CN 5H-2,3-Benzodiazepine, 1-(2-fluoropheny1)-7,8-dimethoxy-4-methy1- (CA

INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L18 1 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 5H-2,3-Benzodiazepine, 1-(3-chlorophenyl)-7,8-dimethoxy-4-methyl-

MF C18 H17 C1 N2 O2

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

L19 1 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN Benzenamine, 4-(7,8-dimethoxy-4-methyl-5H-2,3-benzodiazepin-1-yl)-

MF C18 H19 N3 O2

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

L15 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2010 ACS on STN

RN 1071287-42-7 REGISTRY

ED Entered STN: 09 Nov 2008

CN 3H-2,3-Benzodiazepine, 1-(3-chloropheny1)-3-(4,5-dimethyl-2-thiazolyl)-4,5dihydro-7,8-dimethoxy-4-methyl- (CA INDEX NAME)

C23 H24 C1 N3 O2 S MF

CI COM

SR CA

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L15 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2010 ACS on STN

RN 1028255-11-9 REGISTRY

ED Entered STN: 15 Jun 2008

CN Ethanone, 1-[1-(4-aminophenyl)-1,2,4,5-tetrahydro-7-methoxy-4-methyl-3H-2,3-benzodiazepin-3-yl]- (CA INDEX NAME)

MF C19 H23 N3 O2

SR Other Sources

Database: ChemSpider (ChemZoo, Inc.)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT